The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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VALUABLE MINING MATERIALS FOR SALE.

MESSRS. TREVENA & PRYOR will SELL BY AUCTION, on Tuesday, the 19th inst., by Ten o'clock in the forenoon, at WEST BASSET MINE, in the parish of ILLOGAN, the following MATERIALS—viz.:

MINING MATERIALS—VIZ.:

1 36-inch cylinder ENGINE, with boiler, about 10 tons.
Capstan, shears, and 2 horse-whims; capstan and whim-ropes and chain.
3 10-inch plunger poles.
1 9, 10, and 12-inch H-pieces, with top door-pieces, &c.
52 Fathoms of 11-inch, and 35 fathoms of 9 and 10-inch pumps.
1 8, 9, and 10-inch working-pieces, and 1 10-inch, 2 11-inch, and 2 7-inch clack door-pieces, with windbores to suit the above lifts.
80 Fathoms of 9-inch rods, with plates and pins to match.
100 Fathoms of ladders and shaft casings.

Miners and smiths' tools, bellows, anvil and screw tackle, iron rods, shaft rollers, a quantity of timber, and sundry other useful articles. Also, the

COUNTING-HOUSE FURNITURE.

For viewing the same, apply to the agent on the mine; and for further particulars, to Capt. William Richards, Redruth.—Dated Sept. 6, 1848.

TO CAPITALISTS—PROFITABLE INVESTMENT.

MESSRS. BELL & WATSON are instructed to SELL, BY AUCTION, without reserve, at the GEORGE INN, PILGRIM-STREET, NEWCASTLE-UPON-TYNE, on Tuesday, the 26th Sept. next, at One for Two o'clock in the afternoon (by order of the mortgagees, under an absolute power of sale, unless previously disposed of by private contract, of which due notice will be given), the WHOLE of those rich and extensive LEAD MINES, or VEINS of LEAD ORE, lying or being within or under a certain portion of ground, part of the manor of Alston Moor, commonly called

THE GALLIGILL SYKE LEAD MINES,

held and subject to the terms of a lease under the Commissioners of Greenwich Hospital, comprising the MINES under and above the ground, FIXTURES and MATERIALS, CRUSHING-MILL, DRESSING or WASHING MACHINE, TUBS, WAGGONS, WORKSHOPS, RAILWAY, and every other requisite for the produce and sale of lead ore.

These mines have been opened out during the last six years, and but partially worked, and the late proprietors have incurred very considerable expense in laying out the mines, and preparing them for the development of their valuable and exhaustless resources.

The supply of ore has, during the above period, been annually increasing; and, in the ordinary and profitable progress of working, will be for years to come capable of increased extension—during the last year producing a quantity only exceeded by three out of the numerous mines in this extensive and well-known mining district.

The quality of the ore of these mines ranks with the best, producing an unusually large portion of *silver*; and the mine has been, and is now, in profitable operation, and promising increased and large returns, by its further and more vigorous working.

Messrs. Bell & Watson are also authorised to TREAT for the SALE of the said MINES by PRIVATE CONTRACT, and will receive any proposal or communication, with that view, until the 19th of Sept. next, but not beyond that time, so as, in case of sale, to give sufficient notice to the public.

Messrs. Bell & Watson are further instructed to SELL, at the same time and place, those extensive MINES, known by the name of the GALLIGILL BENTS MINES, contiguous to the above, and subject to the same terms of lease. These mines have not been worked, and, from their extent, richness, and convenience of situation, afford a certain prospect of being profitably worked.

Further particulars may be had of, and all communications are requested to be addressed to, Messrs. Bell and Watson, auctioneers, Bank-buildings, Mosley-street, Newcastle-upon-Tyne.

The mines may be viewed on application to Mr. John Lathern, New Shield, near Alston.—Newcastle-upon-Tyne, August 24, 1848.

EXCELLENT MINING MATERIALS.

A 45-inch ENGINE, BOILER, &c., at WHEAL JANE, in the parish of PERRAN UTHNOE, NEAR MARAZION, CORNWALL.

MR. PENBERTHY has received instructions for SELLING, BY AUCTION, on Wednesday, the 27th of Sept. inst., by Eleven o'clock in the forenoon, at WHEAL JANE, in PERRAN UTHNOE, the following MATERIALS—viz.:

A 45-inch ENGINE (nearly new)—stroke, 9 feet by 7; boiler, 11½ tons; capstan, with oak axle and iron centre-piece, shears and sheaves, 10-inch capstan-rope, 11-inch rods, with faggotted plates, caps, &c., balance and angle bobs.
4 Horse-whims, with shaft tackles, &c.
10 9-feet 6-inch pumps, 6-inch pole, stuffing-box, gland, and case, with H-doorpiece, windbore, &c., to suit.
9 9-feet 11-inch ditto, 11-inch pole, stuffing-box, &c., H-doorpiece, windbore, &c.
5 9-feet 12-inch ditto, 1 10¾-inch, and 1 13-inch workings, and a 14-inch doorpiece.

Pumps, rods, buckets, prongs and joints, staples and glands, shaft pulleys, rod and flanch bolts, 200 fms. whim chains, whim and winze, kibbles, trim waggons and tram iron, smiths', miners', and screwing tools, 36-inch bellows, anvil and mandril, large beam scales and weights, sampling ditto, grindstone, ladders, launders, air-pipes, hutches, barrows, and a quantity of plank and other timber, sheds, &c., and a variety of other articles, together with the ACCOUNT-HOUSE FURNITURE.

The above are strongly recommended to the notice of miners, being nearly new, and in good condition.—Marazion, Sept. 13, 1848.

"IRELAND."—PEREMPTORY SALE OF THE

PLANT AND MACHINERY OF LOUGHSHINNEY MINES.—TO BE SOLD, BY AUCTION, on Tuesday, the 26th Sept., 1848, at LOUGHSHINNEY MINES, situate between RUSH and SKERRIES, on the Drogheda line of railway, about 14 miles from Dublin, the following

MACHINERY AND MINING UTENSILS:

A POWERFUL HIGH-PRESSURE STEAM-ENGINE, on Boulton and Watt's principle; she has 24-inch cylinder, with steam-case, 6 feet stroke, main beam 3½ tons, tube boiler 28 feet long, 5 feet 9 inches in diameter, and all her working gear complete, well adapted for pump, stamps, mill, or factory.

About 240 ft. of 1¼-in. round iron bucket and flat-rods; 10 pairs of rod-plates, with bolts and nuts, 6 and 7¼-inch plunger-poles, 2 flat-rod bobs, with plates, pedestals and brasses, several 8¼-inch and 4-inch metal pumps, large bevel wheel, windlasses, iron blocks, 2-feet hand screws, 2 capstans, 1 horse-whim, a very fine 9¼-inch capstan-rope, 70 fms. long, whim ditto, capstan sheaves, whim-buckets, a large quantity of bar and scrap iron, nuts and bolts, staples and glands, old metal, mining picks and hammers, brass work, smithy and carpenters' tools, buckets, gigging hutches, shaft ladders, oak and deal poles, of various scantling, 7-inch square shaft-rods, 12-inch deals, whip and cross-cut saws, about 10,000 fine bricks, &c.

Sale at Twelve o'clock—the steam-engine at Two precisely.

CHARLES BENNETT, Auctioneer, 14, Dame-street, Dublin.

P.S.—Convenient shipping within half a mile of the mines.

"IRELAND."—TO CAPITALISTS.

AUCTION OF THE INTEREST IN THE LEASE OF THE KILBRICKEN SILVER-LEAD MINES, AND ALL THE VALUABLE MACHINERY THEREON.

MR. JAMES MARSHALL, of Limerick, has received peremptory instructions to SELL, BY UNRESERVED AUCTION, at the MINES—within three miles of the port of Clare Castle, five of Ennis, three of Newmarket-on-Fergus, and 14 of Limerick, on Saturday, the 30th of September, at one o'clock, this very

DESIRABLE PROPERTY.

It is proposed that the interest in the lease of the mine (which is held for an unexpired period of 19 years, at 1-10th of the royalty), together with the MACHINERY, TOOLS, &c., be offered in one lot; and in the event of no competition, be separated, and the machinery sold by the piece; in either way, it will be well worth the attendance of manufacturers or mining companies, as, by the catalogue, it will be seen that the various lots are of the most costly description, and only two years in use.

There is a great facility for shipment, as the port of Clare is within three miles of the mine, over a good level road.

The ore is of the most valuable description—realising about 120 ounces of silver to the ton; and the mine, when stopped for the erection of more powerful machinery (which has been erected, but has never gone to work), was making large profits. This sale only takes place in consequence of many of the shareholders being unable to find the necessary funds to put the new machinery to work.

THE MACHINERY CONSISTS OF—

1 66-inch cylinder DRAFT ENGINE, with 9-ton boiler—complete.
1 27-inch DOUBLE-ACTING ENGINE, with sweep-rods, pumping and winding gear, and fly-wheel, with three boilers, of about 6 tons each.
1 20-inch cylinder DRAFT ENGINE, single action, with one boiler of 7 tons, and one of 14 ton.
1 23-fathom 21-inch plunger lift; 1 23-fathom 17-inch drawing lift—complete.
1 20-fathom 16-inch ditto ditto; 1 16-fathom 12-inch ditto ditto—complete.
2 9-fathom 8-inch drawing lifts; 1 16-fathom 9-inch ditto ditto—complete.
1 7-fathom 10-inch ditto ditto—complete.

A quantity of main and flat-rods, whims, chains, kibbles, and other machinery, which it would be impossible to particularise in the limits of an advertisement, but will be found to consist of every possible requisite for the effectually working of the mine, which will be catalogued.

Terms—Cash: a deposit of 25 per cent. to be paid on each lot, and the remainder of the purchase-money within three weeks of the time of sale. All lots must be paid for and removed at the expense and risk of the purchaser, within three weeks of the time of sale (except the large engine, for which two months will be given for the removal), otherwise the deposit will be forfeited, and vendors have the privilege of again selling the lot or lots. The purchaser pays the auctioneer's commission of 5 per cent., in addition to their biddings.

Catalogues, plans of the mines, with sections, can be seen, and all other information obtained, on application at the secretary's office, 23, King-street, St. James's, London, or of the auctioneer, James Marshall, 96, George-street, Limerick.—Catalogues can also be had at the office of the *Mining Journal*, 26, Fleet-street, London.

KING'S COLLEGE, LONDON.—PRACTICAL GEOLOGY and MINING.—A COURSE of about TWELVE LECTURES, on the PRACTICAL APPLICATIONS of GEOLOGY to ENGINEERING and MINING, by Professor D. T. ANSTED, F.G.S., will be COMMENCED on WEDNESDAY, October 4, at Twelve o'clock, and continued each succeeding Wednesday at the same hour.

Fees for attendance, £1 11s. 6d. R. W. JELF, D.D., Principal.

ROYAL GEOLOGICAL SOCIETY OF CORNWALL.—The THIRTY-FIFTH ANNUAL MEETING of this Society will be HELD in the MUSEUM, on Friday, the 6th October next, at noon.—The officers and council will assemble in the same place at Eleven o'clock.

It is respectfully requested that communications, intended for the meeting, may be forwarded to us at the earliest convenience of the authors. By order,

SAMUEL PIDWELL, } Secretaries.
L. R. WILLAN, }

N.B.—The usual Ordinary will be held at the Western and Mount's Bay Hotel, at Three o'clock.—Penzance, August 14, 1848.

MANUFACTURING PREMISES, SOUTH WALES, on the banks of a tide river, about a quarter of a mile from a station on the South Wales Railway, TO BE DISPOSED OF.—The premises, which are held on lease (at a low rent), 27 years of which are unexpired, consist of a large GLASSHOUSE CONE, with extensive BUILDINGS, TWO COTTAGES, and about FOUR ACRES of LAND; they have, for many years, been in operation as a manufactory of charcoal, sugar of lead, and naptha, but, with slight alteration, might be adapted for other manufactures. They were formerly used as glass-works—the sand of the adjoining coast having proved of very superior quality.

There are two steam-engines, and other apparatus, which may be taken at a valuation.—Coal may be had delivered on the premises at less than 5s. a ton.

For further particulars, apply to T. W. Lawford, jun., solicitor and land agent, Tirydail, Llandilo, South Wales.

THE BRITHDIR COLLIERY, NEWPORT, Monmouthshire, is now in regular WORK, and capable of SUPPLYING from ONE HUNDRED to TWO HUNDRED TONS of COAL PER DAY. The coal is *free* from *stone*, *slate*, or *sulphur*; is a most excellent house coal—makes a very *superior coke*, and, for *smithies* and *forges*, considered to be the *best* in the port.

Price of large coal ..... 8s. 6d. } per ton on board.
Brush ..... 8 0 }
Small ..... 6 0 }

Payment by approved bills, at two months from date of shipment, or 2 per cent. for cash.—Address Mr. Backland, agent to the Brithdir Coal Co., Newport, Monmouthshire.

TODD'S PATENT METALLIC PROTOXIDE PAINT, after four year's experience, is confidently recommended as the BEST PAINT hitherto introduced for protecting iron from oxidation, and cemented surfaces and brickwork from damp and vegetation. Being free from smell and deleterious properties, it may be applied to houses, offices, &c., during occupation, without inconvenience.

For particulars, certificates, &c., apply to B. Todd, 9, Upper Thames-street, London.

WHITE'S PATENT HYDRO-CARBON GAS.—The ADVANTAGES of this GAS are as follows:—It does not require any purification—the cost is much less than that of any other gas—the apparatus necessary for its production is not half the price—it is perfectly free from any sulphuric acid, sulphurous acid gas, ammonia, &c.—it gives a most brilliant light, not injuring the health of the inmates, nor destroying the goods in the house where it is made and consumed.

It may BE SEEN in FULL OPERATION at the ROYAL POLYTECHNIC INSTITUTION, REGENT-STREET, where its properties are explained daily by Professor Ryan.

Parties requiring this cheap and beautiful Gas for lighting Towns, Factories, Railway Stations, Dwelling-houses, &c., may obtain every information and licenses, by application to Mr. Stephen White; or to Mr. George Fowler, at the Patent Hydro-Carbon Gas Offices, No. 9, Lincoln's Inn-fields, London.

BOILER EXPLOSIONS.—TO ENGINEERS, MILL-OWNERS, AND OTHER PARTIES USING STEAM-POWER.

Mr. EDWARD WALMSLEY calls the attention of the above to a MODIFICATION of his PATENT APPARATUS for the PREVENTION of STEAM-BOILER EXPLOSIONS, which he has now fitted up at the under-mentioned places, and may BE SEEN in OPERATION at any time during working hours. It is simple, effective, inexpensive, and not liable to get out of order.

At Mr. Edward Walmsley's, Bankfield Mills, Heaton Norris, Stockport; Mr. Henry Gore's, machine-maker, &c., Lever-street, Manchester; Messrs. Thomas Grundy and Co.'s, machine makers, Preston.

FOURDRINIER'S PATENT SAFETY APPARATUS, for PREVENTING ACCIDENTS IN MINES AND OTHER PLACES, WHEN THE ROPE OR CHAIN BREAKS.

By the ADOPTION of this INVENTION the LIVES of the WORKING MINERS may be PRESERVED, and the PROPERTY of the MINE OWNERS PROTECTED from the serious consequences of either of the following accidents—viz.:

1. From the men, or the load, being precipitated to the bottom of the shaft when the rope or chain breaks: in this case the apparatus is *self-acting*.
2. From either the men, or load, being drawn over the pulley: in this case, also, the apparatus is *self-acting*.
3. From the fearful consequences to men or load of a "whirl," or run: in this case the result is equally *certain*.

A COAL PIT, with the SAFETY APPARATUS ATTACHED to the CAGE, is daily at WORK near BURSLEM, in the STAFFORDSHIRE POTTERIES.

To inspect the apparatus, or to obtain any further information, application may be made to Mr. Edward N. Fourdrinier (the patentee), Cheddleton, near Leek, Staffordshire; or to Mr. Joseph Fourdrinier, 9, College-place, Camden Town, London—who are prepared to GRANT LICENSES for the USE of the PATENT.

IMPORTANT IRON, COPPER, AND TIN-PLATE WORKS.

MESSRS. SHUTTLEWORTH & SONS have been favoured with instructions from trustees, under a mortgage deed, to SELL, BY AUCTION, at the Auction Mart, in London, at an early day, the valuable and important ESTABLISHMENTS of the GOVERNOR AND COMPANY OF COPPER MINERS IN ENGLAND, at CWM AVON, in the county of Glamorgan, and the FOREST WORKS and GRAIGOLA COLLIERY, near SWANSEA, in the same county.

The establishment at Cwm Avon is of the most complete and finished character, and includes every power and erection essential for carrying on, in the most economical manner, and on a large scale, every branch of the iron, tin-plate, and copper trades.

The leases under which the property is held, include several thousand acres of land, abounding in rich seams of superior bituminous coal, including all the veins of argillaceous iron ore of the lower measures, which supply the large iron-works of South Wales, and, in addition, the black-band iron ore, which is wrought at a very low price per ton.

The COLLIERIES in the levels and pits, now working, afford almost an unlimited supply of cheap mineral, within an average of five miles of the shipping port.

The establishment, which was erected at a cost of nearly half a million sterling, consists of the following separate works:—

IRON TRADE.—Seven blast-furnaces, complete, capable of producing from 850 to 900 tons of pig-iron per week, with coke ovens and refiners attached; three puddling and five rail and bar-mills, of the best construction, which are capable of producing 3000 tons of finished bar, or rail, per month.

The TIN-PLATE FORGES and MILLS, capable of working up iron for finishing 1000 boxes of tin-plates per week, with chemical works attached, for the purpose of extracting, during the conversion of wood into the necessary supply of charcoal, for this branch of trade, the naphtha, acetic acid, and other products, and also for the supply of sulphuric and muriatic acids.

The COPPER SMELTING WORKS, which are under one roof, are capable of smelting about 600 tons of ore—equal to 50 tons of refined copper per week, and possess unusual convenience for the supply of water and the cheap deposit of slag.

The COPPER ROLLING-MILL is one of the largest in Wales, with hammers, rolls, &c., attached.

The FIRE-BRICK MILL can turn out 100,000 bricks per week.

In the centre of the works is a large enclosed depôt for stowage of all goods, and also a line of workshops complete in every respect; with the necessary steam-engine, machinery, and tools, for the supply of all kinds of pattern makers, joiners, sawyers, fitters, boiler-makers, smiths', and founders' work required for so large an establishment.

The OFFICES for conducting the business in the central works are most complete.

There is an excellent MANAGER'S HOUSE a short distance from the works, whilst detached, in convenient localities, are about 1000 neat four-roomed cottages, with sufficient houses of a better class for the respective agents and workmen, shops, and a large square fitted for the purpose of a market, and excellent stabling for upwards of 300 horses.

The Advowson of the parish of Michaelstone is in the gift of the vendors, and meeting-houses, reading-rooms, libraries, and schools have been established for the use of workmen.

The ERECTIONS, WORKS, and BUILDINGS, with the exception of two of the blast-furnaces, are in the parish of Michaelstone, held by the company for an unexpired term of 90 years, and the control of the population connected with the works is thus beneficially under the managing director of the works.

The whole of the works are connected by rail or tramroads with the collieries and the shipping port, which is distant only two and-a-half miles; and the South Wales Railway passes close to the premises.

The FOREST COPPER-WORKS at Swansea, are capable of smelting 550 tons of ore, or 45 tons of copper, per week—the works being in every way complete, and the furnace bottoms remaining untouched. They occupy about 60 acres of land, and are situated between the Swansea Canal and the navigable river Tawe.

The GRAIGOLA COLLIERY, about seven miles from the port of Swansea, is worked by level, and is one of the descriptions of steam-packet coal admitted for tender in Government contracts.

The premises may be viewed by application to John Biddulph, Esq., Coed Park House, adjoining the works; and particulars obtained in due time at the general office of the establishment, Cwm Avon; of Messrs. J. C. and H. Freshfield, solicitors, New Bank-buildings; of Messrs. Tilson, Squance, Clarke, and Morrice, solicitors, Coleman-street; at the Auction Mart; and of Messrs. Shuttleworth and Sons, 28, Poultry.

TO IRONMASTERS.—WANTED an ENGAGEMENT, as MANAGER, by a person who has a thorough practical and commercial knowledge of the trade, and who has, for many years, had the successful management of large works; or an appointment as AGENT or SALESMAN to an extensive concern would not be objected to. No objection to the United States or the continent of Europe. The most satisfactory references given.—Address Mr. Thomas, care of Messrs. Dawson and Sons, Cannon-street, City.

TO IRONMASTERS AND OTHERS.—WANTED, by a competent man, who is about completing the erections of extensive rolling-mills in Wales, an ENGAGEMENT as DRAUGHTSMAN and ENGINEER, in the erections of machinery, &c., as connected with iron-works. Can be highly recommended from some of the largest firms.—Apply by letter, on or before the 27th inst., to "A. Z.," care of Mr. Thos. Thomas, stationer, Neath, Wales.

TO MERCHANTS, WHOLESALE HOUSES, PATENTEES, and OTHERS.—A PERSON of respectability and strict business-habits, with an extensive connection among Engineers, Factors, and Manufacturers, in Birmingham and the adjacent towns, is desirous of taking, in addition to his present engagements, an AGENCY (commission or otherwise). Any party having an article of good consumption, and in the market, as regards quality and price, will meet with due attention by addressing a letter, 233, *Midland Counties Herald* Office, Birmingham.

EMIGRATION—AUSTRALIA OR NEW ZEALAND.—A PERSON, possessing a practical knowledge of mining and smelting of metals, would be glad to JOIN any PARTY about to EMIGRATE to either of the above colonies, where his knowledge and services could be made available. He would not object to an engagement for a term of years; and, as he possesses a knowledge of farming and stock, would be willing to take land in part payment of his services.—Applications (post-paid), addressed "W. W.," Post-office, Upper Holloway, will receive immediate attention.

MINING IN AUSTRALIA, NORTH AMERICA, &c.—A GENTLEMAN, of high standing in his locality, who has been for the last 15 or 20 years a large adventurer in the mines of Cornwall—with the nature of which, and with the whole procedure for their working, he is thoroughly acquainted—experienced also in commercial affairs, in which he is competent to undertake a French, Italian, or Spanish correspondence—would be willing to enter upon an ENGAGEMENT to SUPERINTEND a MINING COMPANY in AUSTRALIA, or elsewhere; or to TREAT with any gentleman for the FORMATION of a MINING COMPANY at the former, he himself being ready to bring some capital into such undertaking. As the advertiser will be prepared to tender the highest references in respect of himself, no proposals can be entertained but such as are of first-rate respectability.—Apply per letter (pre-paid), addressed to "A. M. A.," care of the Editor of the *Mining Journal*, 26, Fleet-street, London.

Sept. 11, 1848.

NOTTINGHAMSHIRE.—TO BE SOLD, BY PRIVATE CONTRACT, an UNDIVIDED MOIETY, or HALF PART, of Mr. Thos. Wakefield's SHARE and INTEREST of and in the NUTHALL, CINDER-HILL, and BABBINGTON COLLIERIES, situate near NOTTINGHAM, in the county of Nottingham, now being worked by Thomas North and Co.; together with a similar SHARE and INTEREST of and in the STEAM-ENGINES, MACHINERY, GEARING, and APPARATUS belonging to such COLLIERIES—subject to whatever mortgages, or other debts (if any) legally chargeable upon the said collieries.

To treat for the same, or further information, apply (if by letter, post-paid), to Mr. Cann, solicitor, Nottingham.

FOR SALE (at the works of Sims, Trevena, and Co., Redruth) a NEW 20-horse power ROTATORY STEAM-ENGINE, on Sims's patent combined principle—with or without a boiler. This engine is well adapted for a flour-mill, or for other general manufacturing purposes, and will be sold on very reasonable terms.

FOR SALE, BY PRIVATE CONTRACT—A single-acting PUMPING-ENGINE—cylinder 30-inch diameter, 9-feet stroke, equal beam, with 7-ton boiler, cisterns, spring beam, and first set of rod-shafts attached, being the engine of Wheal St. Cleer.—For particulars, apply to Capt. Osborne, Liskeard; Mr. West, engineer, St. Blazey; or Mr. Rendle, the purser, 13, Octagon, Plymouth.

STEAM-ENGINES.—From 8 to 20-horse power ENGINES ALWAYS IN STOCK.

Apply to Mr. CAPPER, Engine-Maker and Founder, BIRMINGHAM.

Price—£12 to £16; with boiler, £22 per horse.

KESWICK MINING COMPANY.—THIRTY SHARES in this MINE FOR SALE—£3 10s. paid—at 10s. per share discount.—Apply to Mr. Herron, mining agent, 3, Adam's-court, Broad-street.

MINING OFFICES—Established Five Years.—THOMAS P. THOMAS begs to inform his friends and the public, that he has REMOVED from No. 18, Threadneedle-street, to No. 3, GEORGE-YARD, LOMBARD-STREET, LONDON (late Messrs. Phillips and Tiplady's).

N.B.—Dealer in English and Foreign Funds, Mining, Railway, Gas, and other shares.

MR. R. TREDINNICK, THREE KING'S COURT, *LOMBARD-STREET, LONDON*, Continues to DEAL in every description of MINING, RAILWAY, BANKING, INSURANCE, CANAL, and OTHER SHARES.—Statistical information afforded gratuitously upon personal application.—MONEY ADVANCED upon the above securities.

MR. H. B. RYE is a BUYER in the following MINES—viz.: Herodsfoot, Trehane, Wheal Franco, Treviskey and Barrier, North Pool, Comfort, Antimony and Silver-Lead, and Condurrow; and a SELLER in Wheal Seton, South Frances, West Providence, Mary Ann, South Tolgus, Wheal Margaret, West Treasury, and Trevean.—N.B. Every local information may be had on personal application at 30, Old Broad-street, City.

WILLIAM W. TAYLOR & CO., MINERAL SURVEYORS, MINING STOCKBROKERS, &c., *No. 2, ROYAL EXCHANGE-BUILDINGS, LONDON.*

JAMES LANE, MINING SHARE DEALER, *75, OLD BROAD-STREET, LONDON.*

WILSON & FRASER, 2, WELLINGTON-BUILDINGS, LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON SALE PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS.

MONEY.—MESSRS. KILLICK & CO. (late Winstanley, Killick, & Co.), SHAREBROKERS, inform their friends and the public, they make IMMEDIATE ADVANCES, to any amount, on the deposit of English and Foreign Railway Shares, Scrip, and Debentures, upon exceedingly advantageous terms: they also BUY and SELL every description of STOCK and MINING SHARES, at much less commission than usually charged.—6, Bank Chambers, [illegible] Bank of England.

ASTURIAN MINING COMPANY.—Notice is hereby given, that the NUMBERS of all SHARES in this company upon which the calls, due on the 1st of July and 1st of August last, shall not have been paid, with interest, on or before the 2d day of October next, will be advertised as FORFEITED for non-payment of calls. By order of the board, K. MACKENZIE, Secretary.

Offices of the company, 9, Austinfriars, Sept. 8, 1848.

REAL DEL MONTE MINING COMPANY.—A SPECIAL GENERAL COURT of the proprietors of this company will be HELD at the office, No. 2, Duke-street, Adelphi, on Monday, the 25th day of Sept. inst., at One o'clock precisely; for the purpose of a resolution, to the effect, that it is expedient that the company shall be forthwith dissolved.

TRELEIGH CONSOLIDATED MINING COMPANY.—Notice is hereby given, that the ANNUAL MEETING of the shareholders will be HELD at the office, as under, on Wednesday, the 4th of October next, at Twelve for One o'clock precisely. WM. NICHOLSON, Secretary.

57, Old Broad-street, Sept. 12, 1848.

LAMHEROOE WHEAL MARIA MINING COMPANY, London, Sept. 12, 1848.—At a Special General Meeting of the adventurers, held at the offices, 4, King-street, Cheapside,

PETER DAVEY, Esq., in the chair,

It was resolved,—That the purser be requested to give immediate legal notice to those shareholders in arrear of call, due 5th July last, that their shares will be absolutely and irrevocably forfeited, unless the said call be paid to the bankers of the company on or before the 3d October next.

It was also resolved,—That a special general meeting of the shareholders be held at the offices, 4, King-street, Cheapside, on Thursday, the 5th October next, at One o'clock precisely, for the purpose of forfeiting all such shares as may be found in arrear of the said call, on the said 3d day of October, and on other business.

At a meeting of the Finance Committee, held as above, on the same day,

It was resolved,—In accordance with the request of the special general meeting of adventurers, held this day, that the second instalment of 10s. per share, of the call of 20s. per share, made 8th of June last, be now called up, payable on or before the 23d Sept., 1848, to the London and Westminster Bank, Southwark Branch, to the credit of Wm. Pegg, Esq., and others. JAMES CROFTS, Secretary.

4, King-street, Cheapside.

MESSRS. JONES LOYD AND CO.'S BANK.—A Manchester correspondent says that Mr. Entwisle, the gentleman who, till the late meeting of the Lancashire and Yorkshire Railway, was supposed to be chairman elect, is one of the late Members for the southern division of Lancashire, and is to be one of the partners of the new Manchester firm, in connection with the well-known London banking-house of Jones Loyd and Co., on the retirement, after Christmas, of Mr. Edward Loyd. The report now current in Manchester is, that the new firm will consist of Mr Edward Loyd, jun., Mr. Entwisle, Mr. Jervis (for many years a confidential clerk in the establishment), and Mr. Bury (of the firm of Charlewood and Bury), who has been the solicitor to the present establishment. It is rumoured that Mr. E. Loyd, sen., retires with about 700,000*l.*, a much smaller sum than the public generally in the neighbourhood had supposed he would have realised from the very extensive business, known to have been transacted by the firm over a long period of years.

LIVE FROG FOUND IN A COAL PIT.—Some weeks ago, while four persons were employed in digging the pyotshaw coal in No. 8 pit, Gartlee, near Airdrie, they, on removing a mass of coal of about 4 feet in diameter, discovered an elevation in the floor of the coal, which, on being broken, disclosed the live frog now exhibiting in the museum of the Andersonian University. Mr Craig, the well-known lecturer on geology in that institution, went to Airdrie, and examined minutely into the circumstances, and took a written statement from the four persons, whom he found to be young men of probity and good character. The circumstance of toads and frogs being found enclosed in rocks of all ages is no way new, nor is there the slightest reason to doubt they have been so found. In a letter from Dr. Buckland, which Mr. Craig has kindly shown us, he considers that there must have been some aperture through which the animals get ingress; but Mr. Craig mentions that in this case the young men are willing to depone that the overlying mass of coal was not many minutes removed, and that, after breaking the small hillock, in the centre of which the frog was found, and out of which it was carefully removed with the point of a pick, there was impressed on the matrix the most delicate mould of the limbs and other parts of the animal's body. Moreover, that the *toom* had been nearly excavated, and therefore the idea of the reptile getting into its hiding place recently is quite improbable. This seems corroborated by the fact, that the frog was in a dormant state, and allowed itself to be turned over several times before it began to move, and when put into water it was able to swim, and evinced great pain, and changed colour. Mr. Craig mentions that he has all along been exceedingly sceptical as to frogs and toads being found in ancient rocks, but that in the present instance the fact is so well attested, that he must assent to the accuracy of the statement. We copy the following from Mr. Craig's communication:—"That toads and frogs have been found alive in the centre of timber and stones does not admit of a doubt. Dr. Buckland, however, mentions to me that in the experiments he made the animals also got *lean* or died, where an aperture did not exist by which insects got admission, and became the food of the prisoners. Now there is a very well authenticated case in point. Mr. R. Jamieson, a very intimate friend of my own, a Dr. Niven, both now deceased, and Mr. John Patterson, and James Gillies, captain of the Airdrie police, enclosed a toad in common clay, and after putting it into a broken bottle, buried it about 18 in. underground, and at the end of 12 months took it out alive. If an animal can survive 12 months without food, and excluded from atmospheric action, I cannot conceive any circumstance, the conditions being the same, which could occasion death."—*Glasgow Saturday Post.*

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PREVENTION OF COLLIERY ACCIDENTS.

An adjourned inquest on the bodies of T. Purdy and T. Podmore, the two men killed at the Tinker's Clough Colliery, Shelton, by the breaking of a chain, as already noticed, was resumed on Monday, at the Saracen's Head Inn, before Mr. W. Harding, coroner. Mr. Forrester, the mining agent of Lord Granville, at whose colliery the accident occurred, and Mr. Fourdrinier, the inventor of the safety apparatus for the prevention of accidents in mines from the breaking of ropes or chains [described in the *Mining Journal* of the 18th Sept., 1847], were in attendance.

The witness RHEAD was then recalled, and his deposition was read over to him; upon which Mr. FORRESTER inquired if he had never known men swing themselves from the bank into the pit by catching at the ropes or chain, without proceeding the usual way?—The witness replied that he had known such to be the case, but it was not so on the morning of the accident with the men who were killed.

Mr. E. N. FOURDRINIER then produced two beautiful models of his invention, and said, that whether from carelessness on the part of the men, or accident, so far as the breaking of a rope or chain was concerned, or the drawing over the pulley, his invention was equally efficacious. [Mr. Fourdrinier here explained the working of the apparatus, which underwent a very critical and minute examination by the jury, by whom numerous questions were put to the inventor.]

In reply to a question put by Mr. FOURDRINIER to the witness Rhead, as to whether he had seen the apparatus at work in one of Mr. Brindley's pits near Cobridge, he replied that he had seen it, but not at work.

The following witnesses were then called by Mr. Froudrinier, to speak of the efficiency of the invention?—

T. CLORLEY, in the employ of Mr. Brindley, at Sneyd-green Colliery, said that the apparatus was in use at a pit near Cobridge. Since the invention was put up he had gone down repeatedly; the corfe was knocked off, and it did not fall more than 1½ inch. The chain had been broken by way of experiment, and also pulled over the pulley, but the pulley remained perfectly stationary. On one occasion five individuals were in the corfe during the experiments, and it had also been tested with heavy weights, and was quite successful.

R. BADDELEY, a ground bailiff at the Sneyd-green Colliery, also bore testimony as to the efficiency of the invention. He said that the pit where the apparatus was put up was worked previously by a chain, which was not considered safe: but now no apprehension was felt. Before the apparatus was set up he did not go down with the chain, but now he did, and believed he was quite secure.

By a Juryman: Then would you prefer going down a pit with the apparatus in use?—Witness: To be sure I would.

Mr. FORRESTER observed, that no colliery agent was more willing than he was to adopt any expedient he considered calculated to preserve the lives of workmen. They were now working as dangerous a pit as any in the county; and, in order to render it more safe, a considerable sum was being expended to improve the current of air. With regard to Mr. Fourdrinier's invention, it had some good properties about it, but he did not think it quite perfect. He thought there might be a chance of the guides giving way.

Mr. FOURDRINIER observed, that the particular form of the guide, the materials they were composed of, whether chain, wood, or iron, or the strength of them, was a mere matter of detail, and might be varied according to the inclination of the parties. He considered there was not the slightest probability of their breaking.

A Juryman to the witness Baddeley: Do you think the guides are such a part of the apparatus as are likely to break?—Witness: I do not.

The CORONER observed, that on the 17th of August last year, two men, of the names of Harrison and Matthews, were killed at the Bell's Mill Pit of Lord Granville's colliery by the slipping of a chain, and he inquired from Mr. Forrester whether, in his opinion, the lives of the men would not have been saved if the invention had been in use at the pit?—Mr. FORRESTER said, that the accident was entirely the result of carelessness in the men not having hooked themselves properly on. If the apparatus had been in use, it was possible, if the rods had stood, that they might not have been killed.

No other witnesses having been called in reference to the accident,

The CORONER observed to the jury that their first duty would be to find a verdict; and if they thought proper to make any representations as to the apparatus, it might be done afterwards.

A verdict of "Accidental Death" was returned; and the jury, at their own request, were then left alone to consider whether any suggestion should be made.

On re-admission to the room, the foreman, Mr. Boston, said, the jury were unanimous in their opinion as to the importance of Mr. Fourdrinier's invention, and recommended its being put into operation, both by Mr. Forrester and the mining agents in the district generally.—The CORONER observed that, seeing a reporter present, he had no doubt the recommendation would go forth to the public.

THE GREAT VIADUCT ACROSS THE DEE, IN THE VALE OF LLANGOLLEN.

While the speed to be attained by mechanical ingenuity is being intensely considered, the architecture of our railways is not forgotten, and we feel pleased to have it in our power to notice one of the most daring and stupendous efforts of skill and art to which the railway has given rise. We refer to the great viaduct now in course of completion across the valley of the Dee, in the Vale of Llangollen—the dimensions of which surpass any thing of the kind in the world. While the tubular bridges across the Menai Straits and Conway River are, from their novelty, attracting much attention, the undertaking referred to has proceeded nearly to completion, without any considerable notice being taken of it. Its vastness of proportions may be better conceived, when it is stated that, in magnitude it far exceeds what is considered the greatest effort of human skill in connection with railway communication—the Stockport viaduct. The Dee viaduct (for this is the term given to the one at Llangollen) is upwards of 150 feet above the level of the river—being 30 feet higher than the Stockport viaduct, and 34 feet higher than Menai Bridge. It is supported by 19 arches of 90 feet span, and its length is upwards of 1530 feet, or nearly one-third of a mile. The outline of the structure is, perhaps, one of the handsomest that could have been conceived, both as regards its chaste style and attractive finish, and its general appearance is considerably enhanced by the roundness of the arches, which are enriched by massive coins, and the curvilinear batter of the piers; this style of architecture imparts a grace and beauty to the structure without impairing its strength. The greatest attention seems to have been paid to the abutments—the only part of the erection, in reality, where any decorative display could be made. In the middle of both, on each side, there are beautifully executed niches in the Corinthian order, in addition to some higialy-finished masonry. The piers are neatly wrought at the angles, and at the base of nearly each there is a bedding of upwards of 460 square feet of masonry. With the exception of the entradoes of the arches, which are composed of a blue sort of brick, the whole structure is built of beautiful stone—if not as durable, equal in richness and brilliance to Darlydale. The viaduct has an inclination from end to end of 10 feet, and connects that part of the Shrewsbury and Chester Railway between Rhos-y-Medre and Chirk. Viewed from beneath, the vast structure presents a noble and truly grand appearance, and its bold proportions, with its height, cannot fail to call forth admiration from the most indifferent beholder. While the view below developes what art can accomplish, that from the summit surpasses in richness and luxuriance of the picturesque any landscape in the kingdom. Situated in the middle of the far-famed Vale of Llangollen, there is all that nature and art can bestow to make the view charming and beautiful. On one side are bold and swelling hills, on the other a plain teeming with luxuriance far and wide. Within view are Castell Dinas Bran, or, as it is commonly called, "Crow Castle," which is situate on the crown of a conical hill—the glaciated rocks, Wynnstay, and Pont-y-Cyssyllte, or the Dee Aquaduct. This last structure, which conveys the Ellesmere Canal, is within a short distance from the viaduct, and, from its beauty and extent, imparts additional interest to the locality.

The viaduct has been erected by Messrs. Makin, Mackenzie, and Brassy, contractors, at a cost of upwards of 100,000*l.*, being upwards of 30,000*l.* more than the Stockport viaduct. The cost of the timber required to form scaffolding, &c., for its erection was 15,000*l.*, and between 300 and 400 masons alone were employed during the whole time of construction. It is worthy of remark, that, up to Saturday last, no accident of consequence occurred to any of the persons employed in erection; but on that day, we regret to say, one of the workmen was killed on the spot by a portion of the scaffolding falling upon him. Within a few miles distance there is another viaduct in course of building across the valley of Ceiriog. This structure will be upwards of 120 feet high, and will have 10 arches, of 45 feet span, and one of 120 feet. The entire length will be at least 850 feet, and will have cost, when completed, a large sum of money.—*Liverpool Mercury.*

VALUABLE IMPROVEMENT IN SUGAR-MAKING AND REFINING.

A new and valuable discovery in the refining of sugar, and an ingredient for purifying and whitening cane-juice and other saccharine solutions, have been tried with signal success in this State. They were first introduced by the late much lamented Mr. A. Gordon, a gentleman identified with the best interests of Louisiana, in union with Mr. Archbald, whose experience as a planter and refiner is well known, and tried by Mr. Oxnard, in his refinery below the city, during several months, on operations every week of 200,000 lbs. of raw material, consisting chiefly of cistern-bottoms and Cuba molasses. They gave results never before approached. The cistern-bottoms yielded a product, as good in quality as that obtained from raw sugar; while the per centage was equal to that from Havanna sugar, costing double the price. The result, from the application of this new process, was found to be, that a quantity of refined sugar, almost equal in weight to the amount of cistern-bottoms was obtained, which would appear quite incomprehensible to those who do not understand the principle on which the new discovery is based. This important fact, as we understand, was proved to Mr. Valcour Aime, one of the most experienced and extensive planters and refiners in the State, on a recent visit paid by that gentleman to the Louisiana Sugar Refinery. Mr. Aime is well known and appreciated here, for his devotedness to the sugar interest, and the public spirit which he manifests in urging forward every possible improvement in the manufacture of our great staple. To the stimulus and encouragement given by Mr. Valcour Aime, many years ago, the great improvement reached here in sugar-making, is to be attributed. It was this gentleman, who, with a degree of vigour, perseverance, and generous disregard of expense, brought into practical and successful operation (several years ago), the valuable process originally discovered and introduced into this State by Mr. Archbald, of converting, at one operation, cane-juice into superior loaf-sugar, instead of making it, as hitherto, into low raw sugar. Mr. Aime is resolved, we understand, not to stop here, but to accomplish upon this plan, improvements of still greater importance to Louisiana.

Mr. Oxnard originally tried this ingredient during the last crop on the Howell plantation, in which he is interested, and was encouraged by the results he obtained to adopt it in his refinery. Its effects on frosted cane were particularly remarkable, not only in purifying and whitening the juice, but in causing it to produce sugar that, being put into moulds, turned out lumps, equal in every attribute to refined sugar. Before the ingredient in question was employed, the material from the frosted cane could only be put into coolers, where it was necessary to keep it several days, before transfering it to hogsheads; and even then, it only yielded a very low, dark, and viscous material. It drained with extreme difficulty, and gave molasses of a disagreeable taste and bad colour; although the juice had been previously filtered through grain charcoal, and boiled in vacuo.

One of the most striking effects of the ingredients is, a very great improvement in the molasses, which nearly doubles the value of it; for whilst planters' molasses, coming from sugar of sound cane was selling at 18c. the gallon, that of Mr. Oxnard's, produced from sugar made from frosted cane, by means of this agent, readily brought 33c.

Mr. Archbald, we are assured, is in possession of some most valuable secret in sugar-making and refining, by which upward of 95 per cent. of refined sugar is practicably obtained at one boiling, even out of inferior raw sugar; whilst, by the method generally followed everywhere, not more than about 70 per cent. of refined sugar can be got from the best raw sugar after three different boilings. By this plan, too, the whole of the saccharine matter, including that part now converted into molasses, is obtained in a state of superior sugar at a single operation.—*New Orleans Commercial Times, July 22.*

TRADE AND NAVIGATION.—On Tuesday last was printed in a Parliamentary paper, some accounts relating to trade and navigation. The declared value of British and Irish produce and manufactures exported from the United Kingdom in the month ended August 5, 1848, was 4,137,168*l.* In the corresponding month of the previous year 5,062,452*l.*, whilst of the corresponding month in the year 1846, the value was 4,360,748*l.*

On the Winning and Working of Collieries.

BY MATTHIAS DUNN, MINING ENGINEER.

[No. XIV.—*Continued from the Mining Journal of the 26th August.*]

ON THE DIFFERENT SYSTEMS OF WORKING, WITH THEIR RESPECTIVE RESULTS.

The shaft and surface preparations having all been completed, and the pumping and winding engines established, we arrive at the commencement of the coal working; and this is, perhaps, the most convenient stage in which to explain the nature of the various leading systems adopted, and governed by the different circumstances which attend each locality, or by the prejudice or judgment of the party who directs each work. The details consist of an endless variety, but the leading principles may be classified under two heads—viz.: pillar and stall working, or long-wall working, which working is termed in different districts board, stall, wicket, uphill, &c.

The pillar and stall principle comprises the working away of a certain portion of the mine as a first measure, leaving the remainder in pillars, either to be permanently lost, or to be at some future period partially or totally removed; and it is in the form of these pillars, and the proportion of the mine eventually to be obtained, which cause so much controversy, and which embrace such momentous interests. In the North of England collieries, where the board and pillar system may be said to be universal, it is adopted with the full design of eventually removing the pillars; therefore, the proportion of coal to be procured by the first working is varied according to the peculiar circumstances of the mine.

In collieries where the coal lies at a small depth from the surface, the pillar and the wicket may be said to be equal in area; whereas, in deep collieries, and in other districts in which a different system is adopted, the area of the pillar amounts to three or four times that of the board, or excavation. In districts in which the roof is bad, and especially in the thick coal of Staffordshire, the pillars are so disproportionately small, in comparison with the quantity of excavation, that they are looked upon as lost; and in order to guard against the effect of creeps or thrusts, which necessarily follow upon the pillars being left too weak, considerable barriers of coal are arranged, which have the effect of dividing one district of the workings from another. It is not at all uncommon to find collieries working upon a principle of losing the pillars; and, although in some obscure cases it may be unobjectionable, yet it frequently arises from a want of due consideration, and from a lack of practical science. Therefore, under the principle above-mentioned, may be found an endless variety of systems, many of which will be afterwards brought under notice.

Then, with respect to long-wall working, it has also its abettors and objectors. The principle is founded upon the extraction of all the available coal, by the single process of first working, maintaining the roads by means of stone walls, or wooden props. The system itself does not admit of much variety of operations, but sufficient instances will be given to explain its bearing and effects, as contrasted with that of pillar and stall working. These prefatory remarks are for the purpose of apprising the reader of the paramount importance which belongs to the arrangement most suitable to the seam about to be worked; therefore, the following circumstances may be duly weighed and considered as essential. It is totally impossible to imagine the varieties which may occur, but I will here assume some general principles applicable to the long wall system, assuming that all coal mines differing from these data are fit subjects to be worked by means of pillar and stall.

MINES APPLICABLE TO LONG-WALL SYSTEMS.—1. If the coal be thin and hard, or the top and bottom soft, requiring a considerable quantity of cutting for the necessary tram height.—2. If band, or rubbish, is mixed with the coals, or small coarse coal requiring to be stowed underground, so as to afford a cheap and plentiful supply of stuff for filling up the hollows.—3. If the extent from the shaft to the boundary be very limited.—4. If the roof be free from water, and the workings clear of buildings, rivers, &c.—5. If the roof contain ironstone, to be worked with the coal, thereby producing much refuse; or if it be so soft and brittle that it will not stand for the ordinary width of excavations.

In these and many other contingencies, the long-wall system may be recommended, but there may be objections which may render such working impracticable—viz.: 1. In case the working produces a considerable quantity of inflammable air, or choke-damp.—2. If the roof contains water, the letting down of which would spoil the tramways, or overpower the engine apparatus.—3. If the coal be so near the surface that the long-wall working would have the effect of damaging buildings.—4. If the cuttings of the roof, or floor, for height be so soft and friable that they would not be sufficient to support the roads, then the expense of procuring the material from the surface may exceed the value of the coal.—5. If the seam be deep from the surface, and, from its thinness, suitable for long-wall, yet the small quantity that may be produced from one establishment may render its working unprofitable—or, in other words, the maintaining of extensive roads—or the necessary quantity of pits required may not be repaid by the working thereof.

Therefore, under this formidable series of objections, I may sum up the subject of long wall, by saying that it is only applicable to thin seams, lying near to the surface, and in which the workings may be intended to be of a very limited extent. On the other hand, the working by board and pillar implies a moderate thickness of seam, with tolerable roof, in which case it is open to be worked by any one of the numerous systems which science, or the fancy of individuals, may dictate—that is, either to work upon the principle that the pillars are irrecoverably lost, or that they are to be left so strong, and the passages to them so guarded, that eventually they also may be profitably worked away. After the aforesaid remarks, it will easily be understood that a just consideration of the various incidents belonging to each coal field, carries with it the most important results with regard to the proper working of the mine.

On the nature of the roof, and depth from surface, depends the proportions to be taken away in the first instance, so as to prevent a creep; if the roof be sandstone, or a firm dry shale, then the principal workings (if the Newcastle system be pursued) may with good effect be carried on at a width of 4 or 5 yards; whereas, if the roof be soft shale, or broken sandstone, the chief preparatory workings must be still more guarded. Again, assuming the roof to be passable, the size of the temporary, or in some cases, permanent pillars must be determined by the hardness of the coal, the nature of the floor, together with the pressure or depth from the surface; and it is in this most important branch of the art that I may say more gross errors are committed than in most of others. I could refer to incalculable injury committed upon many properties from the want of practical experience in this respect, for where an undue proportion of coal is taken away by the first working, it induces creeps, and all the concomitant evils of crushed coal, the delapidation of roads and air courses, the consumption of labour and material, and the suspension of the powers of production, whilst additional expenditure is called for, to repair the damages arising from such indiscretion.

It is, therefore, of the greatest importance that the plan upon which a colliery is intended to be worked, should be digested and laid out by some person whose experience and scientific knowledge fit him for the task, for nothing is more delusive than appearances in the commencement of coal workings. The pillars may appear strong, the roof good, and all things promise an easy and satisfactory tenancy; but, after the workings become extended, intersected, perhaps, by faults or weak coal, together with water in the floor, then comes the test of strength; and nothing is more common than to see the same mine which previously appeared to be strong and satisfactory, begin to heave in the boards, the roof to fall in, and, lastly, to crack in the pillars, which are indubitable signs of an incipient creep; and if barriers of coal be not left, or stone pillaring instead, the above-mentioned band creep may extend till it shall have overrun a great portion of the colliery. The truth of this assertion may be illustrated by reference to the ancient and extensive colliery property at Castle Comer, in Ireland, in which not less than 1100 shafts have been sunk, and although the coal is scarcely ever found to be deeper than 30 fms., yet the mode of working has been to leave about one-third in pillars, which have all, as a matter of course, been subjected to creeps; and as no plans were kept of these operations, the colliery has for many years been worked upon the remaining pillars; the shafts re-opened, the scraps of coal sought for at random, and the cost of labour alone being established at half the value of the coal. It is impossible to calculate the enormous loss of property (when coal is worth 20s. per ton), which is involved in the sinking of unnecessary shafts, the loss of so much valuable mine, and the additional charge of working such portion of the remaining pillars as may be obtained under such difficult circumstances.

[*To be continued in next week's Mining Journal.*]

THE LATE ACCIDENTS ON THE LONDON AND NORTH-WESTERN RAILWAY.—It is stated that the expenses caused by the late accidents, including all claims, will amount to about 2600*l.* The relatives of the late Col. Baird have intimated their intention not to make any claim on the company.

MINING IN AUSTRALIA.

We have received intelligence from Adelaide to March last, from which we learn, than an important communication had been made to Messrs. Elder and Co., touching a recent discovery of Mr. Finke and his miners, on the Mount Remarkable survey. All known at present is, that a new and valuable lode, of three or four feet big, had been ascertained, and that decisive intelligence of a highly favourable kind may be shortly expected. There is another reported discovery of copper on the lands of a Mr. Hardey, and Dr. Von Sommer's reported coal discovery on the Murray seems to be confirmed.

The outcry for labour continued throughout the colonies. From Sydney we learn that the "want of sufficient labour and capital to work the coal seams is daily becoming more and more apparent, the present supply being no way adequate to the demand. The *Thistle* has been compelled to wait for coal being brought down the river, otherwise she would have left 24 hours earlier; as it is, her commander leaves this at three in the morning, or loses another tide. Should steam communication be extended to Australia shortly, steps must be taken to supply the requisite quantity of coal."

The papers contain the following paragraph of news from New Zealand:—"The alarm caused by the spontaneous combustion of some Kawaw copper ore, shipped per *Rookery*, appears to have subsided—the following quantities having been shipped at Sydney during 1847:—*Parrock Hall*, 9 tons; *Lord Auckland*, 36 tons; *Dublin*, 16 tons; *Autumnus*, 2 tons; *Sultana*, 13½ tons; *Sarah Scott*, 33 tons; *Midlothian*, 51 tons; *Persian*, 59 tons; *Meg Merriles*, 51 tons; *George*, 24½ tons; *Eliza Kincaid*, 116 tons; *Enterprise*, 5½ tons; *Rosalind*, 122 tons; *Marmion*, 49 tons—total, 573 tons."

Perth (Western Australia) papers to the 13th April, give a very satisfactory account of the state and progress of that colony. Tin ore is reported to have been discovered; but, as the statement of copper ore having been found is contradicted, it is possible that the present rumour may be found a hoax also. Dr. Von Sommer intended to proceed to Doubtful Island Bay, for the purpose of testing the accuracy of the report of coal having been found in that direction.

TAXATION ON MINING INDUSTRY IN IRELAND.

About the commencement of the session of Parliament, which terminated on Tuesday last, we earnestly advocated the passing of a law to put an end to the anomaly existing in Ireland, which prevented those entrusted with the management of the estates of minors, lunatics, or other persons bound up by trust deeds, or the incumbents of church lands, from making leases, either of such duration or upon such equitable terms, as would warrant mining companies to embark their capital in the development of our great mineral resources. A law such as we felt it our duty to recommend, introduced by the Government, at the suggestion of Lord Clarendon and Sir W. Somerville, was passed during the session, and thus one great impediment in the way of productive employment in mining operations in this country has been removed, or, at least, there is now much less difficulty in the way of arriving at an equitable arrangement between landlord and tenant, as regards mining property. The absurd and mischievious law, which disabled trustees of minors and of marriage settlements from making leases of mines at less than 1-10th of the produce, has been repealed, and in the new law this most mischievious restriction has been removed. But a still more important alteration is required, to afford anything like fair scope for mining enterprise in Ireland, and as a means of placing this country on an equality with England in this respect. We allude to the mode of rating mining property for the payment of poor-rate. In Cornwall, the land upon which the mine is situate is valued, and not the mineral property, machinery, &c. But in the poorer country, Ireland, where all possible encouragement ought to be afforded to every legitimate project for extending employment, the poor-rate is levied upon the supposed value of the mineral produce, machinery, &c.; and even when the mine yields no profit whatever, but, on the contrary, is worked at a loss, the poor-rate is enforced upon this fictitious valuation. But we shall pursue the contrast further, in order to show the startling inequality and injustice as regards Irish mines. In Cornwall and all other English mining districts, where the valuation is made of the land, and not of the mine, the landlord, in all instances, pays the poor-rate; whilst in Ireland, the onus of payment falls upon the lessee, although the mine may be worked actually at a loss!

It is only necessary that we should submit this plain statement of the facts, in order to show the imperative necessity of such an alteration in the law as would place mining enterprise in Ireland upon an equality with England. No one will deny that such equality ought to exist, and the sooner justice is done in this matter the better. It is our conviction, that when the Irish Poor Law was passed, this unequal pressure on mining enterprise was never comtemplated; but, now that the evil is sorely felt, as a bar to employment and the investment of capital in a country requiring such aid much more than any other in Europe, we are confident that a remedy will be provided at the next meeting of the legislature. There will, we doubt not, be some step taken for a revision of the poor law early next session, and that opportunity should be taken for dealing fairly by the mining interests of Ireland.—*Dublin Mercantile Adv.*

COPPER MINING IN LOCHWINNOCH.—We are happy to learn that the copper ore at Kaime, in the parish of Lochwinnoch, of which some notice appeared in the newspapers some time ago, has been found to be considerable in quantity, and so valuable in quality, that it is likely to form an important addition to the natural resources of this district. It has been long known that copper existed in the locality in question. Mr. Montgomery, the proprietor of the adjacent lands of Cloak, thus speaks of it in his *Essay on the Geology of Renfrewshire and the North of Ayrshire*, published in 1836, amongst the prize essays of the Highland Society:—"Numerous specimens of carbonate of copper are found upon the lands of Kaime, in the parish of Lochwinnoch. The copper ore is found in a fine-grained greenstone dyke, which passes through amygdaloid and wacke. It occupies vesicles, or cells, in the greenstone of the dyke, and the wacke, or amygdaloid, immediately in contact with the dyke, are also impregnated with it. A considerable vein of sulphate of barytes is contained in this greenstone dyke; but in this vein not a single trace of copper has been detected. No attempt has been made to search for copper by mining, although traces of it may be seen on the surface for more than half a mile. In one or two places, the stone is so much impregnated with copper, that no vegetation appears on its surface. Many of the vesicles of the greenstone dyke contain small crystals of quartz; and fine specimens of fibrous green carbonate of copper are to be found, but never of any considerable size." Circumstances having recently induced an English mining company, who had commenced operations at Swinlees, in Ayrshire, on a newly discovered vein of copper ore, to examine the locality, their explorations were rewarded by the discovery of numerous masses of grey copper ore, or sulphuret of copper and iron, containing in some instances as much as 15½ per cent. of copper; and latterly, an immense vein, or dyke of this ore has been discovered, and traced to the lands of Mr. J. Glen, of Kaime, an adit having now been carried through it, in the direction of its course, which is nearly from east to west, for about 50 or 60 yards, exhibiting a breadth of vein of no less than 10 ft., the walls being perpendicular, or nearly so, the depth unknown. It is believed that this vein passes from Mr. Glen's lands into the lands of Mr. Orr, also of Kaime, where considerable quantities of copper ore have been found, although the adit, driven through a trap rock of extreme hardnees towards its supposed course, has not yet reached the vein itself. The workings are carried on night and day. In the other direction it seems to pass into the lands of Cloak, and probably also into those of Tandlemuir, nearly adjacent, in both of which traces of copper have been discovered, although none has yet been wrought. From Kaime many tons of ore of very superior quality have been already conveyed to the English market. This new export from Renfrewshire began, we believe, about two weeks ago. Works are about to be erected for crushing and preparing the inferior kinds of ore, of which there is a great quantity laid aside in readiness; and it seems probable that ere long employment will be given to many persons. The operations are merely in their commencement, but are on a scale of no small magnitude. Any of our readers who may have an opportunity would find a visit to the spot to be interesting.—*Greenock Advertiser.*

THE "GREAT BRITAIN" STEAM-SHIP.—This celebrated vessel, with her machinery, sails, anchors, cables, &c., was put up for sale by auction, at Liverpool, on Monday last, at which port she has been since September last. The *Great Britain* was built at Bristol, in 1844, by the Great Western Steam-Ship Company, for the New York trade: she was 3442 tons, registered old measurement; her length of keel and fore-rake, 286 ft.: ditto over all, 319 ft. 3 in.; beam, 50 ft. 4 in.; depth, 32 ft. She was propelled by engines of nearly 1000 horses' power, and fitted with Woodcroft's patent screw propeller; and has accommodation for 250 cabin passengers, with stowage room for 800 tons cargo (measurement), and 1200 tons coal. Her great strength enabled her to withstand the shocks of the heaviest seas, while stranded in Dundrum Bay, on the northern coast of Ireland, throughout a whole winter, without in the slightest degree altering her lines. The damage done to the engines and ship's bottom has been carefully estimated, after surveys by competent engineers and ship-builders, and, for a moderate sum, the whole ship and machinery might, it is stated, be restored to the original condition. With a smaller pair of engines, capable of propelling her at a slightly reduced speed, by which her coal stowage would be reduced one-half, she would accommodate over 1000 emigrants for a distant voyage. The spacious sale-rooms of Messrs. Tongue and Curry, were densely crowded with merchants from all parts of the kingdom—there being at least 300 gentlemen present. Mr. Curry said, he was instructed to put the vessel up at a certain price, for the parties by whom he was employed, but he should prefer an offer from the company present. Some time having elapsed, the auctioneer informed the company that 20,000*l.* were offered for her. Another pause then ensued, when he said he should take her in, on account of the owners, at 40,000*l.* During the progress of the sale, it was stated in the room, that if from 30,000*l.* to 35,000*l.* had been bid for the vessel, she would have been sold. She originally cost 125,000*l.*

THE MOST FEARFUL CASES OF DROPSY CURABLE BY THE USE OF HOLLOWAY'S PILLS.—The singular efficacy of Holloway's pills in the numerous cures effected by their use, in some of the most obstinate cases of dropsy, is truly astonishing. This medicine acts with such peculiar effect upon the system, that the fluids arising from this direful disease are imperceptibly evacuated, and wholly prevented from any further accumulation. The distressing symptoms which accompany the complaint being thus dispersed, the sufferer regains buoyancy of spirits, and a completely renovated constitution. Females at a particular period of life should have recourse to these admirable pills, which are sold by all druggists, and at Professor Holloway's establishment, 244, Strand, London.

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ENGLISH MINES.

ANTIMONY AND SILVER-LEAD.—Captain Charles Williams (Sept. 9) reports—The work done upon the above mine, since I have been here, is an adit driven about 44 fms. (called the Marlborough adit); in this adit a lode has been driven about 3 fms. towards the south, on the course of the lode, where also a winze has been sunk about 3 fms.; there is also a level driven north 5 fms., on the same lode, further on to hill, in the same adit. On No. 1 lode another level has been driven about 4 fms. still further on, and at the extent of the Marlborough adit, a shaft has been sunk for air, and to bring the stuff to grass, 6½ fathoms; at the tail of this adit a loby has been made, 3 feet high, and covered with Delabole slate, so as to form our dressing floors, which have been laid down and a pool made above, for the washing of ore; near this an office and changing-house have been built, upon a waste mound, which has been levelled in front. Further to hill, on the antimony lode, two shafts have been sunk, and levels driven, about 9 fathoms altogether, and a large pit thrown open upon the lodes. Between the lodes discovered in the Marlborough adit and the Wheal Sarah lode, on Trewichet side of the valley, a quarry has been opened, and 42 loads of stone risen for the use of the mine; an engine-shaft, sunk and timbered between 5 and 6 fms., of the best material, a conduit opened and cleaned about 25 fms., and an adit driven about 30 fms. through a course of elvan, strongly impregnated with mundic and spots of lead. A smaller shaft has also been sunk upon a lode upon this side, and driven upon 2 fms., and very large stones of ore taken up. There was also another shaft, sunk for air upon the adit, on this side 4 fms., where the engine-shaft is now placed; this, together with excavating a small pit, and making three gates and their places, is nearly all the work done upon the mine, except other jobs of a trifling nature.

ASHBURTON UNITED.—Captain J. Kernick (Sept. 11) reports—The tin pitches are all progressing satisfactorily; and, from the late discoveries at Parry's shaft, over which we have a new whim erected, and have just completed the timbering down to the 35 fm. level, we contemplate an important increase in our monthly returns of tin, besides an increase in copper from the same cause—a branch of copper ore, of similar quality to that at Hobson's, being discovered in this shaft, joining the tin lode. We have weighed off 5 tons 16 cwts. of tin of the best quality; and there is about 13 tons of copper on the floors, averaging from 15 to 20 per cent. The cross-cut, from the 14 fm. level, at Hobson's, towards the Great Union lode, has just passed through a large sparry branch, and the strata is again easy for driving—a light buff coloured killas, with an increase of water; and the copper branch is still leading on to a junction, which must be within a few fathoms; the Union end, which has been driven to within 40 fms. to the east of this junction, contains a large lode; and on clearing it out, and driving on it lately, we found several large stones of grey copper ore.

BARRISTOWN.—Captain Thos. Angove (Sept. 8) reports—The lode in the 16 fm. level end east is still without improvement—very much cut up and disordered. The lode in the adit end continues to improve as we get east; it is now about 5 ft. wide, and, at a loose valuation, producing 1½ ton per fathom. The stopes in the bottom of the adit, east and west of the winze, are greatly improved also. We shall ship another cargo, of 25 tons of lead ore, about the latter end of this month, or the beginning of the next.

BEDFORD UNITED.—Captain J. Phillips (Sept. 13) reports—At Wheal Marquis, in consequence of the water in the canal being turned away for repairs, we have been unable to resume sinking the engine-shaft as anticipated, but shall do so to-morrow. We are still driving by the side of the lode in the 90 fm. level east; the pitches in the back of this level are looking well. The lode in the 80 fm. level east is 4 ft. wide, and will produce 5 tons of ore per fm.; in the winze, in this level, there has been no lode taken down, the men having been engaged cutting winze-plat. There has been no lode taken down in the 70 fathom level east.

CALLINGTON.—Captain J. T. Phillips (Sept. 11) reports—At Kelly Bray engine-shaft the lode is nearly 3 ft. wide, with a great deal of mundic and spots of copper ore—sinking about 4 ft. per week. At the north engine-shaft, the ground is not quite so favourable. In the 100 fm. level south, the lode is 1 ft. wide, intermixed with silver-lead ores. In the 90 fm. level south, we are opening tribute ground; in the same level east, we are not yet through the cross-course, but, having driven through some branches of killas, expect we are nearly through it. The winze below the 70 is sunk 15 fms.—lode poor; in this level east the lode is 3 ft. wide, with spots of copper ore; the stopes in the back of this level are producing work of a coarse quality; the lode is 10 feet wide—ground rather hard. In the 50 east, the lode is 2 ft. wide, grey, and very promising. In the 40 east, the lode is hove by a small cross-course. At the south mine, the ground is a little improved in the 125 north; the lode is poor; no lode has been taken down in either level above this since last report.

CWM ERFIN.—Capt. S. Nicholls (Sept. 10) reports—We are putting a cross-cut from the engine-shaft, in the 20 fm. level, to intersect the lode, which we hope to do by driving about 2 fms. The stope, in the bottom of the 10 fm. level, 4 fms. west of the engine-shaft, is at present looking more promising, and producing 10 cwts. of lead ore to the fathom; the tribute pitches, in the back of the 10 fm. level, are looking well—one is set at 7*l.* 10s. per ton, to raise and dress fit for sale; and another at 9*l.* per ton, dressing included.

EAST CROWNDALE.—Captain S. Paull (Sept. 9) reports—Diamond's engine-shaft is sunk through the lode we commenced sinking on, and is now going through a north branch, about 1 ft. wide, composed of peach, spar, and mundic. I am glad to state that the ground is much improved, and our progress will be much faster than for some months past. Thomas's lode, on the adit level, driving west, is 13 ft. wide, composed of gossan, mundic, and flookan on the north lode, a horse of killas in the middle, and 3 ft. of good productive lode to the south, composed of peach, prian, spar, mundic, and tin, worth about 40*l.* per fm. There has not been anything done in the adit end, driving west on the north lode, since my last report, the pitmen there employed being engaged on other work; the stope in the back of the adit level west, on Thomas's lode, continues to look just as it has for some time past; the lode is 7 ft. wide, composed of killas, peach, mundic, prian, and tin, worth upwards of 20*l.* per fm. Thomas's lode, in Thomas's shaft, sinking from the surface, is of a kindly description; the part we are carrying is 5 ft. wide, composed of peach, prian, spar, killas, and a little saving work at times. I expect, in my next report, to be able to give you a more favourable account of this place. We are gradually increasing our dressing-floors, and the tinstuff in the process of cleaning is turning out just to our calculation.

EXMOOR WHEAL ELIZA.—Capts. W. H. Whitford and T. Dunn (Sept. 13) report—Since my last, we have cut a suitable plat in the 12 fm. level, divided and cased down the shaft, put in pent-house, and shall accomplish all our preparatory operations to sinking the shaft, on or before Friday next; after which we shall immediately commence sinking with all possible expedition. As we have suspended all operations on the respective lodes, for the purpose of exploring to a deeper level, the adventurers will not expect, for some time, that our reports should embrace anything relative to the appearance of the lodes, but our progress in sinking only.

GREAT MICHELL CONSOLS.—Capt. T. Richards (Sept. 13) reports—The 45 fm. level, west of the sump winze, is without any alteration; the lode contains mundic, spar, and capel, and in places good stones of ore. In the 35 fm. level, west of the sump winze, the lode contains mundic, capel, spar, and prian, with a small proportion of ore; the ground is somewhat harder for driving—the present price being 4*l.* 10s. per fm.

GWINEAR CONSOLS.—Captain Stephens (Sept. 9) reports—The engine-shaft still continues hard—sunk 3 ft. since my last report. The 20 fm. end west is hard, with much more mundic and spots of ore; the 20 fm. end east is much the same as last reported. The 10 fm. end east is driven, since my last, about 4 ft., and rather improving than otherwise for tin; the winze, sinking under the 10 fm. level, has not improved since my last; the tributers, working in the back of this level, are getting wages at 10s. in 1*l.*

HERODSFOOT.—Capts. J. Medlen and P. Dunstan (Sept. 11) report—The lode is cut in the 106 fm. level 2½ ft. wide, producing good stones of ore. In the 92 fm. level south, we are rising by the side of the lode against a winze sunk under the 82 fm. level; the lode in the end, as far as it is seen, is worth ¾ ton per fm.; in this level north the lode is worth ½ ton per fm.; in a winze sinking under this level, 5 fms. north of the shaft, the lode is 2½ ft. wide, worth ½ ton per fm. In the 82 fm. level north, the lode is worth ¾ ton per fms.; in this level south we have driven 5 fms. by the side of the lode; we expected to have cut through the lode before this, but have found the capels of the lode to be much larger than usual, consequently we are not sufficiently through the lode to report of its size or value; the winze under this level, north of the shaft, is suspended from want of air; we intend to rise against it from the 94 in the course of a week or two; the lode in the winze, south of the shaft, under this level, is worth ½ ton per fm. In the 72 fm. level south the lode is worth 1 ton per fm.; in this level north the lode is worth ¾ ton per fm. In the 62 fm. level north the end is poor; in a winze sinking under this level, near the north end, the lode is worth ½ ton per fm. Winsor's shaft is holed to the 72 fm. level; we expect to have it completed for drawing from this level by the end of the present month. The general appearance of the tribute part of the mine is much as usual.

HOLMBUSH.—Capt. W. Lean (September 12) reports—The ground in the Diagonal shaft is still favourable for sinking. The lode in the 132 fm. level west is 2 ft. wide, composed of mundic, spar, and stones of copper. The lode in the 120 fm. level south is 3 ft. wide, composed of quartz and lead, worth 5*l.* per fm.; the lode in the stopes in the back of this level is 4 ft. wide, producing about 3 cwts. of lead per fm. The lode in the 110 fm. level south is 3 ft. wide, composed of quartz, white iron, and lead, worth 4*l.* per fm.; the stope in the back of this level is improved, and producing saving work. The lode in the 100 fm. level south is 2½ ft. wide, composed of spar, prian, and lead, worth 3*l.* per fm.; the Flap-jack lode, in the same level east, is 20 in. wide, composed o mundic, spar, and stones of copper ore, with favourable ground for exploring; and, from its nature, we think we are near the great cross-course. The pitches throughout the mine are much as usual, producing a fair quantity of lead. The computed parcel of lead ores of 33 tons, has been purchased by Messrs. Mitchell and Son, of Truro, at 14*l.* 10s. 6d. per ton.

KIRKCUDBRIGHTSHIRE.—The agent (Sept. 9) reports—The lode in the 50 end west is still large, and has a kindly appearance, with occasionally good stones of ore; the lode in the same end east has improved in size, yielding half a ton per fathom. The lode is also improving in size in Keith's shaft, yielding half a ton per fathom. In the 40 end west, we have put the men to rise against the winze sinking under the 30, as the air is very close in that level; the winze is worth about 5 cwts. of lead per fm. The lode in the 30 end is still poor; the lode in the 30 end, east of Stewart's, is very kindly, worth above half a ton per fm., and all the size of the end. We shipped 40 tons of lead ore on Wednesday last.

LAMHEROOE WHEAL MARIA.—The agent reports—Davey's shaft is now sunk 37 fms.; and, at 40 fms., Capt. Tabb proposes to drive and cross-cut north and south, to intersect K, L, and M lodes—the two former will be intersected by the end of December. The lode in the 30 fm. level is progressing, and of the same character as last reported. At the engine-shaft, the 50 fm. level will be reached by the end of November, being one month earlier than previously calculated upon (owing to an improvement in the strata, the killas being much softer), when the great F lode will soon be seen—its promising character at surface giving great hopes of its proving valuable at the above depth. Thus, by the end of this year, and the application of the requisite capital, something decisive must be known of the lodes in question—being four, out of six, existing between the two shafts—all of which the proposed cross-cut will, in due time, take and develope fully.

LEWIS.—Capt. S. S. Noell (Sept. 9) reports—The lode in the 70 east is 2 ft. wide, saving work for tin; the lode in the 70, west from sump-shaft, on the south branch, is producing good quality tinstuff; the ground in the 70 south is more favourable than when last reported. The lode in the 60 east is 2 ft wide, yielding some tin, and very promising; the lode in the 60 east, on the south branch, is 18 in. wide, worth 7*l.* per fm.; the lode in the 60 west, on south branch, is much improved since my last, now worth 6*l.* per fm.; the lode in the winze, sinking under the 60, on the south branch, is 18 in. wide, worth 15*l.* per fm. The lode in the 50 west, on the south branch, is 6 in. wide, yielding some good quality tinstuff. The lode in the 40 east is 2 ft. wide—saving work for tin. All other places are much the same as when last reported.

MENDIP HILLS.—Captain F. C. Harpur (Sept. 11) reports—No material alteration has taken place in the appearance of the lode in the 38 fm. level since my last—its present breadth being about 2 ft., composed of flookan, spar, and iron; ground rather hard for driving. In the slag department, we continue to press forward with our different operations as fast as possible; we have a large pile of slag prepared for the furnaces, and intend lighting them to-morrow morning; should the work continue the same as that at present removing to the dressing-floor, I hope to get a sufficient quantity to keep us smelting during the remaining part of the week. In the slag ground, we are at present laying open our cutting through a bed of slag stuff, between 14 and 15 ft. thick—some part of which is work of good quality; in fact, the whole heap will ultimately be removed to the floors, after we have completed the object now in view—viz.: laid open our cutting sufficiently far to effect a communication with the eastern or more productive part of the valley, which is being done with all possible dispatch.

SOUTH WHEAL TRELAWNY.—Capt. W. Jenkin (Sept. 11) reports—We are still driving the cross-cut west of Snell's engine shaft, with eight men; in the 30 fm. level the ground is favourable—in from shaft 16 fms.

TAMAR SILVER-LEAD.—Captain J. Sprague (Sept. 11) reports—The engine-shaft is sunk 5 fms. 4 ft. below the 175 fm. level, the lode in which is 4 ft. wide—work of a coarse quality; in the 175 end, south of the shaft, there has been no lode taken down since my last. The 160 end is suspended for the present, and the men engaged rising towards the winze for ventilation. In the 145 end the lode is 2 ft. wide, yielding good work. In the 135 end the lode is still about 4 ft. wide, and producing work of a promising appearance. The 125 end is also suspended for the present, by means of so much work coming from the tributers. At North Tamar, the engine-shaft is sunk 5 fms. 3 ft. below the 70 fm. level, and the ground favourable for sinking. In the 70 end, north of the shaft, the lode is 3 ft. wide, producing good stones of ore. We sampled, on Saturday, the 2d inst., computed 80 tons of rich silver-lead ores, samples of which have been forwarded to the different smelters.

TINCROFT.—Capt. Peter Floyd (Sept. 11) reports—The 142 fm. level east, on Highburrow lode, is worth 35*l.* per fm. for tin. The stopes in the back of the 120 fm. level are worth 16*l.* per fm. for tin. On Martin's lode, west of engine-shaft, we have holed the winze in the bottom of the 120 fm. level, and have set two pitches—the one in the bottom at 4s. in 1*l.*, and the other in the back at 3s. 6d. in 1*l.* Chapple's lode, in the 100 fm. level west, is 2½ ft. wide, with good stones of copper ore. In the 90 fm. level west, the lode is worth 12*l.* per fm. for copper. The 80 fm. level west is worth 6*l.* per fathom for copper. Dobree's lodes, in the 58 fm. level, east of Chapple's shaft, is worth 4*l.* per fm. for copper. At Wheal Providence, the lode in the 33 fm. level east is 2½ ft. wide—kindly but poor. At North Tincroft, the lode in the 100 fm. level east is worth 6*l.* per fm. for copper. In the 100 fm. level west, the lode is 2 ft. wide, with occasional stones of copper ore. In the 90 fm. level east, the lode is worth 8*l.* per fm. for copper; in the back of this level we have set a new pitch, at 4s. in 1*l.* In the 90 fm. level west, the lode is 1½ ft. wide, with good stones of copper ore. In the 80 fm. level east, the lode is worth 10*l.* per fm. for tin. At Palmer's, the 80 fm. level west, on East Pool lode, is worth 5*l.* per fm. for copper. The 70 fm. level west is worth 4*l.* per fm. for copper. Stainsby's shaft is now about 9 fms. below the adit level. In the cross-cut driving south, towards this shaft, we have cut a branch; and, prior to the end of the month, we trust we shall meet with the lode.

TRELEIGH CONSOLS.—Capt. W. Symons (Sept. 9) reports—In Garden's shaft, below the 100, the lode is 3 ft. wide, with stones of ore, jack, caples, and spar, underlaying north, 8 in. in a fathom. The 90, East of Garden's cross-cut south, this is to cut the south part of the lode, which is working below the 80 fm. level. In the 70, west of Garden's, the lode is 1 ft. wide, but little ore. In the winze below the 60 west, the lode is 2 ft. wide—no ore to value. In the 50, west of ditto, the lode is 2 ft. wide, but very little mineral. Wheal Parent engine-shaft, sinking in the country, the shaft below the adit ground still favourable. The adit cross-cut, north of ditto, to cut Wheal Orphan lode, east from Parent's adit lode, is 15 in. wide, with spar on the middle lode, caples, and occasional stones of ore. We have weighed a part of our ores for the sampling, and have calculated to have about 180 tons.

TRENANCE.—Captain R. Dalton (Sept. 13) reports—The deep adit, north of Dalton's winze, is not looking so well—the ore not appearing to continue, though there are quantities of greens and soft vughs; the new pitch (No. 3), driving east from the winze (which was set to Hams and partners, 1 fm. as trial), I think will prove to be the principal guide to our operations. We took out, on Monday, a piece of malleable copper about 30 lbs. weight. There is also a good branch of grey ore; the whole seems to be dipping down, which is what I like to see; and last night, after I had returned home late, Capt. Tom was waiting to tell me that another piece had appeared, and they had exposed about a foot square of it. I have purchased Wheal Grey's 40-in. engine, with boiler, &c., and have set the same to be carried.

WEST WHEAL JEWEL.—Capt. R. Johns (Sept. 11) reports—In the 70 fm. level, west of Williams's cross-course, on Wheal Jewel lode, the lode is 18 inches wide, and worth 3*l.* per fm. In the 57 fm. level, west of Williams's cross-course, on the same lode, the lode is 3½ ft. wide, and worth 5*l.* per fm.; in the rise, in the back of the 57 fm. level, west of Williams's cross-course, on the same lode, the lode is 3½ ft. wide, and worth 6*l.* per fm. In the 57 fm. level, east of William's cross-course, on the same lode, the lode is looking more promising than when last reported. In the 47 fm. level, west of William's cross-course, on the same lode, the lode has not been taken down in the past week. In the deep adit, west of Hodge's cross-course, on the same lode, the lode is 8 in. wide, saving work. In the 30 fm. level, west of Quarry shaft, on Tolcarne tin lode, the lode is 18 in. wide—unproductive. In the deep adit, west of Quarry shaft, on the same lode, the lode is 18 in. wide; this lode is looking promising for tin. The stopes in the back of the 12 fm. level, east of Pryor's winze, working on tribute, are worth 25*l.* per fm. In the stopes, west of Pryor's winze, on the same lode, the lode is worth 27*l.* per fm. The stopes in the bottom of the 12 fm. level, on the same lode, are worth 23*l.* per fathom.

WHEAL COAD.—Capt. Sands (Sept. 13) reports—We have, in costeaning to hill, cut two splendid tin lodes, carrying a fine blue tin capel and a quantity of ore on the surface; the stratum is very congenial for tin, composed of growan, or decomposed granite. We have driven through our lode in the adit, which, on measurement, is 16 ft. 4 in. big, composed of a beautiful felspar, mundic, can, and large spots of ore; I have no doubt, 30 fms. deeper, we shall have an abundance of copper ore from this lode, and we are now driving on to hill, for the purpose of intersecting our tin lode a-head. We have abundance of water coming from hill in the adit, which makes me think we are not far from another lode. I have no doubt, upon our cutting the tin lode, that we shall make large returns above the adit level; the large course of mica at the entrance of the adit is underlying to the lode, and mica is the very mother of tin; I never saw anything like it in any other mine in the county, or abroad, where I have been. I am in hopes of intersecting the tin lode, at 20 fms. from surface, in the course of next month, as the ground is favourable for driving, the great expense being timber. I have no question of doubt of this making a first-rate adventure, and the time is not far distant when you will see Wheal Coad figuring in the ticketing list, and that smartly too; but if you push the mica, large profits may be realised from this alone, sufficient to pay all expenses of working the mine, and give handsome dividends to the adventurers.

WHEAL MARY ANN.—Captain P. Clymo, jun. (Sept. 12), reports—The

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lode in the 40 fm. level, south of Barratt's shaft, is 4 ft. wide, and worth 12*l.* per fm.; the stopes in the back of this level are looking well, but the ground at present is rather hard for working. The 30 fm. level, south of Barratt's shaft, is holed to the 30 fm. level, north of Pollard's shaft; the stopes in the back of this level are producing a fair quantity of lead. The lode is not yet cut in the 40 fm. level, at Pollard's shaft, but we are hourly expecting to do so. The lode in the 30 fm. level, south of Pollard's shaft, is 2 feet wide, and worth 8*l.* per fm. The winze under the 15 fm. level, south of the shaft, is suspended, on account of the water. We have put our crushing machine to work, and it answers remarkably well.

WHEAL TRELAWNY.—Captain J. Bryant (Sept. 12) reports—Phillips's shaft is sunk to the 72 fm. level, where we have commenced to drive the cross-cut east, and hope to intersect the lode in two months from this time. In the 62 end north no lode has been taken down since my last report, and there is no material change in the 62 south. The lode in the 52 end, north of Phillips's shaft, is large, composed of can, spar, and lead, worth 10*l.* per fm.; in the south end, in this level, the lode is unproductive at present; the lode in the winze, sinking under this level, is worth 9*l.* per fm. At Trelawny's shaft, sinking under the 52, we have again met with a hard floor of elvans, but hope we shall soon get through it; the lode in the 52, south of this shaft, is still large, and worth 8*l.* per fm.; in this level north the lode is also large, and worth 6*l.* per fm.; this end indicates an improvement shortly. The lode in the 42 end, north of this shaft, is 1½ ft. wide, composed of can and lead, worth 7*l.* per fm.; the lode in the winze, sinking under this level, is worth 10*l.* per fm. The stopes, throughout the mine, are producing a fair quantity of ore. At the north mine, in the 30 fm. level, north of Smith's, we have driven 10 feet on a small branch north of the cross-course, and have commenced driving west, where there is a great quantity of water issuing out, thinking the main part of the lode is in that direction; the ground here is easy for driving, and hope to prove it shortly. We sampled, on Saturday last, a parcel of ore, computed 94 tons, which will be sold on the 18th inst.

WHEAL TREMAYNE.—Capts. J. Phillips and William Blewitt (Sept. 9) report—The lode in the 50 fathom level (south lode) east of the cross-cut, south of Michell's shaft, is 5 feet wide, and worth 15*l.* per fm. for tin; in the 50 fm. level, west of the cross-cut, the lode is 1 ft. wide, producing moderate work for tin; we have driven 14 fms. in this level on good tin ground, and which is still favourable for driving. Madden's shaft is sunk 30 fms. below the 30 fm. level; the lode is 3 ft. wide, producing moderate work for tin; in this part of the mine our prospects are very encouraging, as we shall be able to open a great deal of tin in a short time. In the 30 fm. level, west of Field's shaft, on the south lode, we have cut the lode west of the flookan; it is 2 feet wide, producing good stones of copper, and a good deal of water issuing therefrom, so much so, that Wheal Margaret is quite drained, and we shall now be able to resume our operations there. In the 30 fm. level, north of Alexander's shaft, we have intersected the north lode, and have driven 6 ft. on it, but we have not yet seen the north wall; the last 15 in. produced moderate work for tin. The other parts of the mine are much the same as when last reported on.

WHEAL VINCENT.—Capt. J. Spargo (Sept. 15) reports—In driving the south cross-cut, we are still intersecting small veins or branches that proceed from the lode, as might be expected on getting near it, and a great deal of water is gushing from the present end; there is no material alteration in the ground since last reported on, neither do we expect any, until we come within a few feet of the lode. In driving the deep adit, on the north lode, we are still breaking stones spotted with copper; we have about 2 fms. more to drive before we get under the old workings, where we expect a change.

WHIDDEN.—Capt. J. Kernick (Sept. 11) reports—Caunter's shaft is sinking below the deep adit, and the ground has become much more easy—having passed through a quartz course, about 7 ft. broad. The shallow adit, driving east under the hill, begins to show some proximity to tin ground—the lode having a fair quantity of tin, mixed with mispickel, zinc, &c. We have set a pitch to four men between the shallow and deep adits, opposite Caunter's shaft. A good pile of ore has been raised during the last week, which produces, per assay, 1 cwt. to the ton of stuff; the success of this pitch will likely lead many more to try other parts of our various openings.

FOREIGN MINES.

ALTEN MINES.—Mining report, from the 1st to the 21st August:—

Raipas.—The inclosed report, from Capt. Monk, shows an improvement in the workings at this mine, which I hope to find further verified by the present month's returns. During the last six weeks, the prospects have been rather dull and disheartening; but the material change now noted in the appearance of the lode, in the 10 and 15 fm. levels, is more cheering, and holds out hopes of our being able to increase the monthly returns. The exploratory workings, in the 20 fm. level, under old No. 11, are still unsuccessful; but, at the present depth of only 1 fm. from the former workings, we could scarcely have expected a change. The 20 fm. level from Monk's shaft is very promising, and the lode contains some good purple ore in the gossan and quartz; it is not at present rich, but the returns will fully cover the cost of exploring the lode at this depth, and the stopes will be be worked with advantage hereafter. The present ore delivery note contains 183 tons of the produce of this mine; and we continue to make returns as quickly as circumstances will permit.

United Mines.—The improvements last noted, in Ward's lode, still continue favourable; but we do not expect any material increase in the returns before the lode is further developed to the eastward by the level now at work. We have picked the whole of our stock collected last winter, and the principal part of the produce has been returned to the smelting-house. The prospects on Hoskins's lode are still good, and the tributers' produce greatly exceeds the average quality. The operations at Woodfall's are principally confined to the backs, and at the surface, where a small parcel of good ore has been produced. The general appearance of the lodes, at these mines, is more flattering than at any time during the last six months.

Old Mine.—The success of the tributers last month has induced some of the more speculative of our workmen to explore the lodes in the westernmost part of the mine; and, after encountering many obstacles, they were rewarded for their perseverance, by the discovery of a good bunch of ore, which promises a good reward to the workmen, and a still greater benefit to the association. The returns of tribute ore have been very good, and the quality is rather above the average.

Ryper's.—We are now enabled to employ more tributers on the new lodes in this district, and hope to be able to make a corresponding increase in the returns. The produce of our last month's working was small, but profitable; and we expect the present will be still more satisfactory.

Mancur's.—The quality of the produce has exceeded our expectations. We shall continue the tribute pitches on the same part of the lode, and hope to be still more successful. No material change has taken place in the appearance of the lode, but the percentage of the returns has evidently improved.

Michell's.—The tributers continue to make good and satisfactory returns; but we are still unable to increase the number of pitches, in consequence of the number of hands employed on exploring the surface.

Wilson's.—A small parcel of good ore has been returned from the old backs, but the great quantity of water in the old workings prevents us from following the lode in depth.

Carl Johan's.—We have this month obtained some fair returns from a new discovery, made by some tributors, close to our old surface workings. The lode, however, only skirts the side of the mountain, and does not present any permanent appearance. The returns, for a short time, will be profitable, and we hope the stimulus given by this little discovery will lead to something of much more importance. The whole of this district appears to be intersected by a great number of orey veins, the appearance of which leads me to believe that a want of funds is the only impediment to our fully exploring them at a deeper level, and, at the same time, of rendering them an important and profitable branch of your establishment. We shall continue to open ground, and develope the resources of this mine, as extensively as our present feeble means will allow.

Powder House.—The returns in the present delivery note were obtained from a small lode, recently discovered, a few fathoms to the eastward of our former workings; the ore was of short duration, and the prospects hold out no hopes of permanancy. The workings in the mine are suspended until the winter, when they will be resumed by the workmen now exploring the surface.

Quenvig.—Another new and very promising lode has been discovered here in a most convenient situation, a short distance from the sea. Two men have been exploring on tribute; and, after working a month unsuccessfully, they suddenly came on a small vein of rich yellow ore, which has since made a very favourable development. The tribute returns rather better than 1 ton of ore of 22½ per cent.; and 2½ tons of 7 per cent. are the produce of 14 days; we now expect the men will make larger returns; and their increased earnings, during the present month, will fully remunerate them for the trouble and risk incurred.

New Lodes.—In consequence of the dangerous nature of the ground, we are obliged to commence a level at the foot of the precipice, for intersecting Joki's lode, in Mathison's valley; the compound parts of this lode are different from any of the other lodes on the Kaasford side, consisting of rich purple ore, thickly disseminated throughout a stratum of quartrose magnesian limestone. The produce has hitherto been regular and remunerative; and we hope, on again intersecting the lode, to find it equally productive and profitable. Didliffe's lode has been partially worked on the backs, and a small parcel of good ore has been returned. Gultormsen's lode, situated on the top of one of the mountains, above the limits of vegetation, promises more permanency than many of the others; but its inconvenient situation renders its exploration both difficult and expensive. The present operations are on tribute; and a small parcel of ore has been brought to the smelting-house, and found to contain 10½ per cent. of copper. The average produce, I expect, will not be found quite so good. The exploratory workings, on the Melsvig lode, have not answered our expectations. The lode in the new sink, recently commenced, has been very irregular and uncertain. A few tons of ore have been produced; and we shall continue to explore the backs, in the hope of making some discovery before the winter sets in. Another lode has been discovered, about 200 fms. to the westward of the Melsvig lode, on which we commenced a level a few days ago; it contains some good yellow ore, and can be seen for many fathoms on the side of a precipitious mountain; the indications are promising; but I cannot yet venture an opinion on its future value.

Ore Dressing.—All the smalls have been dressed and returned through the separators; but a scarcity of water for the stamps compels us to stock our halvans for some future time. *Copy of Report from Samuel Monk, Mining Captain.*

Raipas, July 19.—In the 20 fm. level the lode is at present chiefly composed of gossan intermixed with quartz, containing purple ores, now producing about 2½ tons per fm.; the ground, at the same time, being speedy, and favourable for driving. In the 15 fm. level the lode in the roof is averaging from 2 ft. to 6 ft. in size, containing rich purple ores, and wearing altogether an aspect of a most brilliant description, and producing about 6 tons of ore per fm. In the 10 fm. level workings the whole of the bargains have greatly improved lately, which will tend somewhat towards increasing our produce beyond what it was last month; the ground, however, still continues so very hard, that the progress of our men is checked considerably in consequence thereof. In the winze, in the old 20 fm. workings, we have sunk somewhat more than a fathom in depth after a smooth wall, in search of No. 11; but as yet our success in this quarter has not proved so rapid as I had hitherto anticipated, but it is to be hoped, ere long, a change will take place in this bergain, to set us upon a firmer footing at Raipas than we have experienced for some time past. Should anything new take place between this and the departure of the steamer, you may fully rely upon hearing from me.

CARADON WHEAL HOOPER MINING COMPANY.

At a general meeting of shareholders, held at Launceston, on the 1st inst., the accounts were presented, showing—Mine costs to June 7, 164*l.* 0s. 1d.; to July 7, 125*l.* 11s. 5d. = 289*l.* 11s. 6d.—By cash from last account and calls, 256*l.* 8s. 8d.—leaving balance against mine, 32*l.* 0s. 10d.; merchants' bills not paid, 468*l.* 18s. 4d.; arrears of calls, 352*l.* 3s. 2d. The accounts were passed; a call of 2*l.* per share was made, and the purser instructed to sue defaulters with a merchants' bill, without further notice.—The Rev. James Carthew was appointed inspector of the mine, which he had consented to undertake gratuitously.—It was the wish of the meeting that the captain should confine his work to the intersection of the lodes in the 58 fm. level; and the sinking of the new shaft on Pearse's lode, and to have flat-rods connected to the engine, if wanted. Capt. Richards not having been able to attend to the survey of the mine, as requested at the last meeting, it had been inspected by Mr. George, who had furnished the following report:—

August 31.—As I am a shareholder in this mine, and Mr. Pearse had a desire that I should see the underground department, I, in company with Capt. Seymour, descended and surveyed the mine throughout. My attention was first drawn to the lode cut south, which is Daw's lode; I saw the above lode, about two years since, in the 17, where it was large and kindly; I also saw it in the 30 and 40, where it was improving; in the 50 I saw the same lode, above 3 feet wide, thickly spotted with ore, but not rich. Our north lodes, in the granite, are small, but kindly. I would now call your attention to the lodes further south, which are Carpenter's and Pearse's lodes—we expect to cut the former lode, in driving about 4 or 6 fms. further. The ground in the end is very favourable—the present price is 4*l.* 8s. per fathom, in a light blue killas, congenial to copper; and about 32 fms. further there is Pearse's lode; and between these two lodes we shall intersect two others, which are very kindly at the surface. To conclude, I am of decided opinion, that the mine ought to be further prosecuted on the lodes, as the indications fully warrant a further outlay.—Wm. George.

Sept. 6.—Since the meeting, I have commenced sinking the shaft, on Pearse's lode, and find it to be a lode of large dimensions, and of the most flattering character, composed of the finest gossan, decomposed spar, pregnated with gray and black copper. I must say, that this is one of the promising lodes to the surface—if not superior to any that I have seen in this neighbourhood. I have no doubt, if it continue its width and good prospects until we reach the 20 fm. below the surface, that it will be found to turn out a profitable lode to the shareholders, as I am well assured the copper that may be found in it will be of good quality; had I been allowed to sink this shaft two years back, I think the mine would now be paying dividends.—John Seymour.

GREAT ROUGH TOR CONSOLS MINING COMPANY.

The two-monthly meeting of adventurers was held at the offices, Threadneedle-street, on Monday, the 11th inst. The mines cost-sheet for July, amounting to 230*l.* 3s. 2d., and the purser's cash account, showing balance in favour of adventurers of 155*l.* 1s., were examined and passed. The liabilities to be provided for, before a call made at the next meeting would become available, were the costs for August, September, and October, which were estimated at about 900*l.*, including additional pitwork and merchants' bills, to meet which there were—Cash in hand, 155*l.* 1s.; part of last call, not yet collected, 215*l.*; and proceeds of sale of forfeited shares, 183*l.* 15s. = 553*l.* 16s.—No call, however, was made at this meeting. The tenders for the 15 forfeited shares were opened in succession, and the biddings were—15*l.* 2s. 6d. per share for 6 shares; 15*l.* ditto for 15; 16*l.* ditto for 15; 14*l.* 10s. ditto for 3; 15*l.* ditto for 2; 16*l.* per share being the highest bidding, the shares were allotted accordingly. It was then proposed by a shareholder, and resolved unanimously—That, considering the peculiar circumstance of the great depreciation of mining property, rendering these shares, for a long time, unsaleable, the sum of 56*l.* 5s., being 3*l.* 15. per share more than the amount of calls due upon the said shares at the time of forfeiture, and of those since made, for the prosecution of the adventure, be offered to the defaulter of the calls on the shares in question for his acceptance, as soon as received from the purchaser.

The following is the report of the agent, Capt. J. Hitchens:—

Great Rough Tor Consols Mine, Sept. 8.—Since I wrote you yesterday, no change in the appearance of the lode in the 30 fm. level cross-cut, south or Morris's, has taken place. We are now in from the north wall about 9 ft.; we are not yet through the caples, which are still very hard: the branch, or leader, which we have gone through, is about 15 in. from the north wall of the lode, and is upwards of 2 ft. big—15 in. of which is very similar to the samples handed to you by Mr. Josiah H. Hitchins, and the whole, 2 ft. and upwards, having a very promising appearance indeed; and it is my firm belief that, when we are in a position to save the stuff, or work dry, it will be found to contain a much greater per centage of copper than the samples you have had assayed. We are using all diligence to get through the lode as soon as possible, to enable us to drive both east and west on the leader, when I hope my reports will be much more interesting than they have hitherto been, as, from present appearances, a good progress will be made; and I hope, at the same time, to be breaking ore. The ground, which is granite, in Morris's shaft, under the 30 fm. level, is of a very favourable nature; and the sinking is going on very satisfactorily—three fathoms have been let at 10*l.* per fathom. In Thomas's shaft the ground (killas) is of a very promising nature, and intersected with branches of ore and mundic—one of which was met with last night, which produced good stones of yellow copper ore. The great quantity of water we have to contend with in this shaft makes the ground very expensive for sinking through; 2½ fms. more remain to be sunk to reach the 30 fm. level, which has been let at 28*l.* per fm.; there are 12 men employed in this shaft, and, by stimulating them to extra exertions, by an offer of a small reward, which I have done, and it being a long month (five weeks), I have good hopes that the shaft will be down, or deep enough for us to commence cross-cutting to the lode early in the ensuing month. Our engine and all the machinery continue to work in perfect good order.

The analysis by Mr. W. Longmand, of the sample referred to in the report:—Copper, 5·75; iron, 23·2; manganese, 8·4; sulphur, 31·00; silica, 30·40; water, 1.25 = 100.

Since the meeting, the following report has been received:—

Sept. 13.—At present, appearances in the cross-cut are much the same—harder ground I have not seen for years, and the men are making but very little impression on it. However, perseverance and patience will get through it, and, I hope, open new prospects on the foot wall. We have some good stones of ore coming up from Thomas's shaft, and the ground is getting more favourable; our prospects here are good.

Great Michell Consols.—At a special general meeting, held at the offices, on the 14th inst., the proceedings of the committee of management, since last meeting, having been confirmed, it was resolved, that all operations be for the present suspended, except driving the 35 and 45 fm. levels west; and that the expenditure be confined purely to this operation.—A call of 5s. per share was made, payable before the 30th inst.—The mine is henceforth to be considered as divided into 1900 shares—660 having been relinquished.

Lamheroge Wheal Maria.—A special general meeting of adventurers was held at the offices, King-street, Cheapside, on Tuesday last, at which the second instalment of the call of 30s. per share was made payable in 10 days; and such a determination was shown by the large number of influential shareholders present to effectually support the mine, that a handsome proportion of the new call was responded to on the spot. For the resolutions passed at the meeting, see our advertising columns.

South Wheal Francis.—The following is the statement of accounts for June and July:—Balance in hand end of May, 503*l.* 13s. 9d.; by ore sold, June 1, 851*l.* 19s. 10d.; July 6, 1818*l.* 7s. 2d.; tin, July 29, 372*l.* 15s. 10d. = 3546*l.* 16s. 7d.—To labour cost for June, 674*l.* 10s. 10d.; July, 534*l.* 5s. 11d.; merchants' bills, 820*l.* 6s. 4d.; dues, 202*l.* 17s. 6d. = 2332*l.* 0s. 7d.—showing balance in favour of mine of 1214*l.* 16s.—By dividend of 5*l.* per share, 620*l.*—leaving now in hand, 594*l.* 16s.—Profit for the two months, 711*l.* 2s. 3d.

Wheal Walter.—The adjourned general meeting of shareholders was held at the offices, King-street, Cheapside, on Wednesday last, when further accounts were submitted from Mr. Weekes, the late purser, who expressed his willingness, through his solicitor (Mr. Bridgman), to attend any adjourned meeting, on being paid his expenses; this, however, the meeting would not allow, considering it his duty to attend, to offer any explanation of his accounts; they, therefore, came to the resolution of adjourning the meeting for a fortnight, to afford him an opportunity of attending.

Cornwall New Mining Company.—We are informed, that the directors are about to commence operations on the Trevortha and Georgia Mines, and which, from their well-known qualities, will, it is fully expected, pay well upon the investment. They have decided on delaying the working of further mines until returns are procured from the above.

Singular Discovery.—A correspondent of the *Buffalo Express*, writing under date of June 14, from Ontonagon, Lake Superior, says:—"Mr. Knapp, of the Vulcan Mining Company, has lately made some very singular discoveries here in working one of the veins which he lately found. He worked into an old cave, which has been excavated centuries ago. This led the workmen to look for other works of the same sort, and they have found a number of sinks in the earth, which they have traced a long distance. By digging into these sinks they find them to have been made by the hand of man. It appears that the ancient miners went on a different principle from what they do at the present time. The greatest depth yet found in these holes is 30 feet—after getting down to a certain depth they drifted along the vein, making an open cut. These cuts have been filled nearly to a level by the accumulation of soil, and we find trees of the largest growth standing in this gutter; and also find that trees of a very large growth have grown up and died, and decayed many years since; in the same places there are now standing trees of over 300 years' growth. Last week they dug down into a new place, and about 12 feet below the surface found a mass of copper that must weigh from 8 to 10 tons. The mass was buried in ashes, and it appears they could not handle it, and had no means of cutting it, and probably kindled fire to melt or separate the rock from it, which might be done by heating, and then dashing on cold water. This piece of copper is as pure and clean as a new cent; the upper surface has been pounded clear and smooth. It appears that this mass of copper was taken from the bottom of the shaft at the depth of about 30 feet. In sinking the shaft from where the mass now lies they followed the course of the vein, which pitches considerably; this enabled them to raise it as far as the hole came up with a slant. At the bottom of the shaft they found skips of black oak from 8 to 12 inches in diameter. These sticks were charrred through as if burnt; they found large wooden wedges in the same situation. In this shaft they found a miner's gad, and a narrow chisel made of copper. I do not know whether these copper tools are tempered or not, but their make displays good workmanship. They have taken out more than a ton of coble stones, which have been used as mallets. These stones were nearly round, with a score cut round the centre, and look as if this score was cut for the purpose of putting a withe round for a handle. The Chippawa Indians all say that this work was never done by Indians. This discovery will lead to a new method of finding veins in this country, and may be of great benefit to some. I suppose they will keep finding new wonders for some time yet, as it it is but a short time since they found the old mine. There is copper here in abundance, and I think people will begin to dig for it in a few years. Mr. Knapp has found a quantity of silver during the past winter.

MINING IN THE EASTERN DISTRICT.

The mines in this district (I refer more particularly to the lead mines) are looking well. The reports of the agents will furnish you with the value of the different ends and pitches; but, as these are daily—nay, almost hourly—varying, it is difficult to judge of the value of a mine from them. I, therefore, purpose to give a few remarks, gathered from careful enquiry and observation.

Trelawny—On the whole, looks well; at the present moment the south ends are not so rich as they have been, but the nature of the lode is such, that at one moment it may be poor, and at the next rich. There is a good lode in the 52 fm. level, at the new engine-shaft; and in the north mine more than 60 fms. of good ore ground have been gone over; just now a cross-course appears to have heaved the lode. This north mine is upwards of 200 fms. on the course of the lode, and, as no ore has been taken from it, is of great value to the concern, and makes Trelawny a valuable mine.

Mary Ann—In the south part, is looking well; but the main dependence of the mine is in cutting the lode good in the 40, south of Pollard's shaft, which is hourly expected, and may, probably, be cut before you receive this. In the level above, the lode has greatly improved of late, and hopes are, therefore, entertained of a good lode in the 40.

South Trelawny—Is at present an enigma: where the lode was expected to be cut, a branch, 6 in. wide, was met with, and which, by many, is considered *the* lode. However, it has not been opened upon, but the cross-cut continued, until it is now within 3 fms. 2 ft. of being under the perpendicular of the lode in the adit; a fortnight more will settle the question.

Trehane—Is going on quietly and profitably, and likely to do so for years, although it is the delight of many to talk of the shortness of the sett. From the present underlay of the lode, it will continue in this sett for 100 fathoms deeper than it now is. The usual two-monthly dividend of 1*l.* per share, will be declared on the 21st inst.

Herodsfoot—For this and the next month, will return 200 tons of ore, though this month's may not be quite 100 tons. The mine is looking well, and bidding fair to be the greatest in the neighbourhood. The reserves of ore are considerable, and the ends and pitches looking well. The machinery is not only efficient, but valuable.

West Caradon—Is reported as looking well. I have not yet been there, but understand that parties who know the mine are picking up shares.

If you could induce agents, in writing their weekly or monthly reports, instead of merely valuing the *ends*, to state the quantity and average value of the ground gone over since their last reports, it would be more satisfactory and intelligible to your readers, and they would be able to form a more correct estimate of the value of the mines.

At Par Consols, a dividend of 50*l.* per share, = 6400*l.*, was declared on the 6th inst., leaving a balance in hand of 480*l.* 10s. 10d. The profit on the four months' working was 7892*l.* 12s. 3d. The mine is said now to be the richest in Cornwall.

Wheal Tregordan.—The engine was set to work here on Wednesday morning, and forked the water to the bottom (7 fms.) in three hours. Capts. Bryant and Richards then broke some fine work from the bottom of the shaft, where the lode was reported to be 18 in. wide, and worth 15*l.* per fathom. The shaft was set to be sunk to the 12 fm. level, for 4*l.* 10s. per fm., which may be accomplished in about a fortnight; and the lode will then be driven upon. The engine, which is a small portable one of about 6-horse power, is calculated to take the mine to the 30 fm. level. A sample of the ore, which I saw assayed this morning, yielded 67½ per cent. of lead, and 163 ozs. of silver to the ton.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

Bwlch Consols.—I am credibly informed, that the 25 fm. level is worth full 100*l.* per fathom, and that the lode in the engine-shaft improves in depth. The machinery is not efficient for dressing more than 80 to 90 tons per month; but additional erections are now being made, and shortly the produce will be at least 120 tons per month.

Condurrow.—Should the prospects of the mine continue to improve, shares will be very valuable; and I think she will prove one of the best investments in the county. There is a valuable lode of copper in the 60, going east of the engine-shaft, yielding from 6 to 7 tons of ore per fm. of good quality; also, a good lode east in the 70 fm. level; in the 70 fm. level west there is one of the richest lodes of tin ever seen in the parish of Camborne, and the other parts of the mine looking equally promising.

St. Kew.—Messrs. Gray and Stephens have made some important discoveries in the neighbourhood of the Antimony and Silver-Lead Mines, from which they have realised, it is stated, upwards of 10,000*l.* within the last fortnight. The mine consists of copper and lead, which has been purchased by some parties at Manchester.

Wheal Franco, Capt. Edwards says, looks better at this moment than she has ever before done. With the present standard, she more than pays costs, and is very much improved in her lower levels. No tutwork has been stopped—not even the lobby for the new water-wheel—and the materials have not been allowed to decrease.

Wheal Henry never looked so promising as at the present time; the lode in the 110 fm. level is yielding 5 tons per fm., with three or four other promising objects, which bids fair to make her a standing mine.

Wheal Yeoland.—The discovery in the new south lode continues to pay the entire cost of the mine (steam-engine, engine-shaft, new south adit, 22 east, &c.); this is well. A slide has gone through the shaft at about 28 fms. from surface, which accounts for the failure in the 22 fm. level.

The returns of the Board of Trade for August show an increase in the imports of copper ore, and a diminution in unwrought iron, steel, and quicksilver, while the exports show a decrease in iron, steel, copper, brass, and lead, and an increase in unwrought tin and tin-plates.

Mining in Plymouth.—We are glad to find that a spirit of mining is developing itself in this county, and the neighbourhood of Exeter bids fair to rival some of the great and successful operations near Tavistock. A short time since an extensive sett was granted by Baldwin Fulford, Esq., at Dunsford, near that city. Since then another sett has been granted by Sir Lawrence Palk, adjoining this company. The first is called the Wheal Anna Maria, and said to be in the same strata as the Devon Great Consols; the sett contains seven lodes, and the indications are of a first-rate order. The lode they are sinking on is 7 ft. wide, with a very rich gossan on the back, and composed of peach, mundic, quartz, pryan, fluorspar, and good stones of copper ore; the country being a beautiful blue killas, and large granite rocks within half a mile, &c. A water course has been brought from about four miles up the River Teign, for working the wheel. The men are now busy sinking the engine-shaft, and intend to cut the lode in the 20 fm. level. In the opinion of practical men, it is calculated that it will cut rich. Altogether the machinery and progress of the works were highly approved of at the general meeting held by a large and respectable body of the shareholders about a fortnight since.—Correspondent of the *Plymouth Journal*.

Polberrow Consolidated Mines.—The creditors of these mines met, on Wednesday last, at the office of Messrs. Smith and Roberts, Truro. There was a very full attendance. After hearing from Mr. John Taylor, jun., a full explanation of the state of the mine, and of its monetary affairs, the creditors most generously agreed to accept 10s. in the 1*l.*, instead of 15s., as proposed, at the last meeting, to be paid to them. We understand that arrangements have been made for payment of the composition on Saturday next, after which immediate possession of the mines will be had, and their working resumed. Too much praise cannot be given to the parties engaged in bringing this transaction to so satisfactory an issue, particularly to the Vice-Warden and the Registrar of the Stannary Court, and also to the creditors, to many of whom, we understand, large amounts were due, and who, consequently, must have made large sacrifices, for the sake of the mining labourers of the district. It is also highly creditable to the merchant creditors that, while accepting, in satisfaction of their own claims, a composition of 10s. in the 1*l.*, they have liberally allowed the debts of the tributers, labourers, and small creditors, to be paid in full.—*Cornwall Gazette.*

Stealing Ore.—R. Richards, of Breage, was, on Saturday last, committed to the county gaol for trial, for stealing lead ore from Wheal Rose, Sithney.

Recently at Wheal Cherry Mine, in the parish of Lelant, a water wagtail, commonly called "dish-water," built her nest and hatched her young in the cage of a whim, during its constant revolution both night and day.

Patent Alkali Company.—The directors held their meeting on Thursday last, but no dividend was recommended, for which various reasons were assigned; but one, it was said, would be declared at the next half-yearly meeting.

ACCIDENTS.

Duckinfield, Ashton.—We regret to learn, that an explosion of fire-damp occurred at the Victoria Pit, on Tuesday, by which two miners, named Lees and Bullock, lost their lives.

Sheffield Coal Company.—As A. Plant, jun., was working in the Birley Top pit, nearly a ton of earth fell, injuring his legs and abdomen. He was speedily extricated, and conveyed to his father's house; but he died after about half-an-hour's excruciating agony.

Tividale.—J. Stokes was killed by a fall of coal at Messrs. Bagnell and Jesson's colliery.

Sedgley.—At the Prior-field stone pit, J. Dunn was killed, while working in the hollows, by some of the clods accidentally falling from the skip, whilst the bankswoman (deceased's sister) was landing it.

Wednesbury.—W. Jones, *alias* Rock, was dreadfully injured about the body—several of his ribs being fractured, and the spinal chord affected—by a fall of coal at Oak Colliery.

Delabole Slate Quarry.—A labourer, named Rolling, while greasing some part of the machinery connected with the steam-engine was killed.

Miraculous Escape.—A man named James Collins, a miner at St. Blazey, whilst picking nuts at a distance from St. Blazey, on an old burrow mine, known by the name of Saint Blazey Consols, overreached a bush hanging over an old shaft, 7 fms. deep, and fell to the bottom. Having providentially escaped serious injury, he resolved to exercise every effort to extricate himself; and his only means of escape was by climbing up the shaft, he at once set himself to the task, which he happily accomplished in about 10 hours—from 8 A.M., till 6 P.M. As the place was at a distance from the public road, and he was, of course, quite beyond hearing, he must otherwise have inevitably been starved to death.

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning Eleven o'clock.

Bank Stock, 9 per Cent., 197	Belgian, 4½ per Cent., —
3 per Cent. Reduced Ann., 86	Dutch, 2½ per Cent., 44¾ 5
3 per Cent. Consols Ann., 85⅞ 6	Brazilian, 5 per Cent., 75½
3¼ per Cent. Ann., 86⅞ 6½	Chilian, 6 per Cent., 86
Long Annuities, 8 15-16	Mexican 5 per Cent., 16⅞
India Stock, 10½ per Cent., 236	Russian, 5 per Cent., 99½ 100
3 per Cent. Consols for Acct, 86⅛	Spanish, 5 per Cent, 11⅛
Exchequer Bills, 1000*l.* 2d. 23 26 pm.	Ditto 3 per Cent., —

Mines.—There has been a fair amount of business transacted in the mining share market during the week, and several negociations are still pending. From the constant inquiries for shares in the improved and improving mines, we are led to expect, that some considerable dealings will take place during the ensuing week.

At Par Consols meeting, held on Tuesday week, a dividend of 50*l.* per share, amounting to 6400*l.*, was declared, leaving a balance of 480*l.* 10s. 10d. in hand.

We are advised, that a considerable improvement has taken place in Devon Great Consols. The lode in the Anna Maria shaft, in course of sinking below the 50 fm. level, is magnificent—estimated worth 200*l.* per fm. In the 25 fm. level, west of the western shaft, at Wheal Fanny, the lode is now turning out upwards of 50 tons per fm.—ore worth from 270*l.* to 300*l.* per fm. Some business has been done in these shares, arising from the improvement.

Buyers are to be found for North Pool, Comfort, Carn Brea, and Condurrow—the latter mine having considerably improved within the last few days, and several shares changed hands. The lode in the 60 and 70, east of the engine-shaft, is represented as very productive; while in the 70 west a rich course of tin has been discovered.

Treviskey and Barrier have been sought for, and several changed hands; whilst an advance has taken place in the price.

Mendip Hills have been in request during the week, and several large purchases effected. We learn that an inquiry has been made for shares in the Bwlch Consols and Llawrcwmbach Mines, but we are not advised of any business having been transacted.

Shares in the following mines have changed hands during the week—viz.: Devon Great Consols, Treviskey and Barrier, West Wheal Jewel, West Caradon, Great Rough Tor Consols, Wheal Trehane, Wheal Trelawny, Mendip Hills, Devon and Courtenay, Carwinning Hill, Carn Brea, South Francis, Camborne Consols, South Trelawny, West Tolgus, Herodsfoot, Antimony and Silver-Lead, Condurrow, Gwinear Consols, Cwm Erfin, Tamar, West Francis, &c.

The Great Rough Tor Consols bi-monthly meeting was held on Monday, when the statement of accounts presented a balance in hand of 155*l.* 1s., with calls unpaid, and proceeds of sale of 15 shares, amounting to 398*l.* 15s.; whilst July cost, of 230*l.* 3s. 2d., is to be deducted—no call was deemed necessary. Fifteen forfeited shares were sold by tender, realising 16*l.* per share—previous notice having been given to each shareholder, that they were open to the highest tender, being in accordance with the 19th and 21st rules, or regulations, of the company, which directed the sale of forfeited shares.

Great Michell Consols adjourned meeting was held on Thursday last, when a call of 5s. per share was made.

Lamerhooe and Wheal Walter meetings have been held this week, reports of which will be seen in another column.

A case came before Alderman Challis, at the Guildhall, on Wednesday last, which was remanded to yesterday, in which Edward *Allgood* Dickinson was charged with obtainining a bill of exchange for 300*l.*, under false and fraudulent pretences. It appeared that a Lieut. Tracy, R.N., gave the said bill to one Henry Lowless to get cashed, at the same time placing in his hands 100 shares in the *(South)* Callington Mining Company, as a collateral security, who entrusted the same to Dickinson, for the purpose which Lowless received them. Dickinson called a few days afterwards on Lowless, and stated that, in consequence of the party, who he expected would cash the bill, having referred to the *Mining Journal*, and found the same quoted at 14½, he declined to advance the money. The bill and shares were enquired for, and, not being forthcoming, the prisoner found himself face to face with the Alderman. We notice this case, principally to state, that it was not Callington Mine shares which were placed in the hands of the party referred to, but scrips, or certificates, of the South Callington.

Imperial Brazilians have been in demand at buyer's pieces; but few have changed hands, not realising our quotations. United Mexicans have also been sought for at lower prices. Australians have been done, and inquiries at buyer's prices. Copiapo, Bolanos, and Altens, have also been done.

Dispatches were received, at a late hour, yesterday, from the Alten Mines, which are given in detail in another column, and will be found of a highly satisfactory character.

Railways.—The panic which appears to possess the holders of railway shares does not seem to be in the least abated, but rather to have increased. To see such a wholesale waste of property is distressing, and calls loudly on railway directors to deal as gently as possible with the unfortunates who are expected to pay up calls, but who must submit to immense sacrifices to do so. It is a strange anomaly that the Government Securities, paying a much lower rate of interest, should remain so steadily at a comparatively high price, when, at the same time, railway shares, yielding 6, 7, or 8 per cent., should be so depressed.

HULL, Thursday.—The business passing in shares continues to be of the most limited nature. There are few buyers, and no inducement to sell, except the pressing one of want of money on the part of weak holders, perplexed with calls.

Sale of Landed Property in North Wales.—Two considerable estates in Denbyshire and Flintshire were sold at Garraway's, on Wednesday last, by Mr. Alderman Farebrother. The first was the Bryn-y-Pys property, comprising nearly 3000 acres of land, with a residence, the rental of which was stated in the particulars at 4460*l.* After a spirited competition, this property was sold for 150,000*l.* The other estate, lying in the parishes of Erlistock and Bangor, in the same counties, comprised 1684 acres, producing a rental of 3566*l.* per annum, was sold for 130,000.

Contract for Iron.—The East India Company will, on Wednesday next, receive tenders for the supply of iron and steel. The establishing of railways in India will necessarily cause a great demand for iron and locomotives; and it is remarkable that, although iron is known to exist in various parts of that vast empire, there has not yet been adventurers bold enough to explore and work the mines—consequently, they will be obliged to import their iron, as they are copper, lead, steel, &c., from England—particularly for shipbuilding, the greater portion of the company's steam-vessels being iron.

Importance of Railways.—When the railways which are now in contemplation are completed, and it is probable that the greater portion will be so in the course of the next five years, we shall have upwards of 10,000 miles of railway open, on which, judging from the numbers employed on lines now open, (viz., 14 per mile), 140,000 persons will be permanently employed, at good wages, representing, at five to a family, three-quarters of a million of the gross population. The importance of this addition to our internal communications will be appreciated, when it is remembered that there are only about 4000 miles of inland navigation, and 30,000 miles of turnpike-roads open for traffic in the country. During the year 1847, it appears, by returns of the Board of Trade, that there were conveyed on the various lines then open, 7,000,000 tons of merchandise and goods, 8,000,000 tons of coal, 500,000 horned cattle, 1,500,000 sheep, and 10,000 horses. The receipts from the passenger traffic were 5,024,000*l.*, and from other sources, 3,342,000*l.*, thus showing that the passenger traffic was 60 per cent., and the income from all other sources 40 per cent.

Cornwall Railway.—The number of shares into which this project is divided, stands thus:—Great Western, all paid up, 1500; Bristol and Exeter, 2250; South Devon, 3000; by the public, deposit and call paid, 4219: total number on which the deposits and calls have been paid, 10,969. By the public, call unpaid, 8691; shares unsubscribed for, 12,340—total, 32,000. The estimates for making the line, amount to 1,600,000*l.*

London and North-Western Railway Company.—It will be recollected that, during the dispute between the authorities of the above company, and the old engine-drivers and firemen, the guards and breaksmen readily undertook, at the request of the board, to ride on the foot-plate of the engines, in order to acquaint the new drivers with the character of the road, and to point out to them the signals at the various stations. We learn that the manager of the line brought, a few days since, their good conduct before the attention of the directors, who passed the following resolutions:—"That this board has much pleasure in recording its sense of the excellent conduct of the guards and breaksmen during the period of the line being worked by the new drivers.—That the ready and cheerful manner in which the whole of them undertook the duty suddenly imposed upon them, merits the approbation of this board.—That the freedom from accident, in the conduct of the service during the period alluded to, is in no slight degree to be attributed to the active assistance of this class of their servants and that their attention to orders, under very peculiar circumstances, deserves this testimony from the board, in corroboration of that general good conduct which has so long characterised them as a body."—It was likewise resolved, "That a gratuity be given to each man employed in this extra duty.—That the minute be printed, and that a copy of it be given to the guards and breaksmen, with the name of the party to whom it specially applies."—It is stated that nearly 200*l.* have been thus distributed among the guards and breaksmen of the company.

High Tor Tunnel.—A communication was effected a few days since between the north and south ends of the northern High Tor Tunnel. This tunnel is on a somewhat difficult curve; but, on the workmen meeting, it was found to have been set out with such accuracy, that the centres of the two portions, where the miners met, on being proved by the surveyor, Mr. J. Wheatcroft, were found not to vary half an inch laterally.—*Derbyshire Reporter.*

Novelty in Chimney Building.—The lofty chimney at Messrs. Joule's brewery, Stone, has lately undergone some repairs, and has had a large cast metal top placed on it, without the use of scaffolding. Mr. J. A. Cartwright, steeple builder and repairer, from Castle Donington, Leicestershire, accomplished the work with single ladders only, although the chimney is nearly 30 yards high.—*Ibid.*

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1000	Abergwessin	7	—
512	Albert Consols	1	2½
1024	Alfred Consols	4½	2½
235	Andrew and Nangiles	28½	5
1000	Antimony and Silver-Lead Mining & Smelting	5	6½
1024	Ashburton United Mines	8½	10
1624	Balleswidden	9	18
128	Balnoon Consols	25	25
10000	Banwen Iron Co.	6	6½
1000	Barristown	4¼	1
4000	Bedford	2½	2
1244	Birch Tor Tin Mine	9½	1½
8000	Blaenavon	50	17½
100	Botallack	175	60
120	Brewer	5	7
10000	British Iron, New, regis.	10	13
—	Ditto ditto, scrip	10	10
128	Budnick Consols	52½	35
128	Callestock	17	10
1000	Callington	19	20
1000	Camborne Consols	5	12
20000	Cameron's Steam Coal	6	1
256	Caradon Copper Mine	9½	2
256	Caradon Mines	22½	10
256	Caradon United	24	5
256	Caradon Wh. Hooper	21	10
1000	Carn Brea	15	95
3000	Carthew Consols	1½	5
2048	Cascade	1	—
112	Charlestown	220	60
512	Coatlithe Hill	¼	1
500	Comblawn	5½	6
128	Comfort	45	37
256	Condurrow	20	35
2560	Cook's Kitchen	14	2
1000	Coombe Valley Quarry	3½	4½
6500	Cornish Mining Co.	2	2½-¾
20000	Cornwall New Mining	1	1
1000	Copper Bottom	1½	6½
1024	Costeen	4½	20
225	Craddock Moor	16½	5
128	Creeg Braws	120	100
500	Cubert Mine	12½	10
1000	Cwm Erfin	3½	1½
300	D.Prior & Buckfastleigh	14	26
7100	Derwent	8½	5
845	Devon & Courtenay Con.	7½	¾
1024	Devon Great Consols	1	205
1000	Dhurode	2	5
186	Dolcoath	30	15
2560	Drake Walls	4	4
10000	Durham County Coal	45	9
3000	Dyfngwm	10	12½
512	East Alvenney	5½	12½
112	East Caradon	47	47
2048	East Crowndale	5½	2½
512	East Combe Silver-Lead	6½	6½
128	East Pool	5	10
100	East Relistian	22	40
9000	East Tamar Consols	¼	¼
—	East Wheal Albert	1	3
94	East Wheal Crofty	125	280
1024	East Wheal Fortune	2	3
1024	East Wheal Friendship	3	3½
128	East Wheal Rose	50	800
—	East of Scotland Iron Co.	2½	1½
123	East Wheal Seton	14	10
256	Exmoor Wh. Eliza	5	8-10
512	Fowey Consols	40	45
1024	Freidd Llwydd Mines	1½	3½
6400	Gadair	2	2
20000	Galvanised Iron Co.	10	1½
4000	Gen. Mining Co. for Irel.	1½	1½
2048	Goldscope Mine	2	2
256	Gonamena	34	5
128	Goonvrea	4	2
100	Great Consols	1000	400
1600	Great Michell Consols	1½	¼
256	Great Resugga Moor	11	6
512	Gt. Wh. Rough Tor Con.	18½	16
1200	Growa Slate Company	5	5
256	Gwinear Consols	7	3
6000	Heignston Down, Con.	¼	2½
256	Herodsfoot	18	25
10000	Hibernian	12½	1½
239	Hobb's Hill	6	1½
1000	Holmbush	19	1½
827	Kirkcudbrightshire	5½	2
2048	Lamheroe Wh. Maria	11	1
128	Lelant Consols	90	60
160	Levant	—	120
1000	Lewis	15	5½
1000	Llwyn Malees	5	—
3600	Llynvi Iron	50	50
256	Lostwithiel Consols	15	15
6000	Marke Valley	10	2
5000	Mendip Hills	2½	¼
5000	Merionethshire Slate Co.	1½	2
128	Metha	34	133
20000	Mining Co. of Ireland	7	4½
256	New East Crowndale	3½	2½
128	North Fowey Consols	37	10
100	North Pool	45	390
140	North Roskear	5½	155
262	North Wh. Leisure	1½	2
15000	Northern Coal Co.	23	2
128	Par Consols	—	1009
4000	Pennant	2	1
100	Penrhiw	30	65
1024	Penzance Consols	16*s* 3*d*.	1
1280	Perran St. George Un.	13	20
128	Perran Wh. Virgin	9½	10
512	Plymouth Wh. Yeoland	6½	15
256	Polsaith Consols	4½	4½
10000	Rhymney Iron	50	13
10000	Ditto New	7	6½
1000	Rosewall Hill	1	5
256	Rosewarva Mines	—	12
128	South Caradon	10	350

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price
1100	South Dolcoath	4	4
256	Sth. Friendsh. Wh. Ann	20	4
256	South Molton	5	8-10
256	South Tolgus	10	52½
256	South Trelawny	20	6
128	South Wheal Basset	110	119
256	South Wh. Betsey	2½	12½
124	South Wh. Frances	160	200
1000	South Wh. Maria	2½	1½
10000	Southern & Western, Irish	2	4
280	Spearne Moor	30	40
256	St. Austell Consols	9	—
94	St. Ives Consols	—	320
128	St. Michael Penkivel	5	10½
999	St. Minver Consols	1	6
1000	Stray Park	43	15
9600	Tamar Consols	3	5½
1024	Tavy Consols	4	8
6000	Tincroft	7	5
1000	Tin Vale	2½	3½
128	Tokenbury	152½	10
256	Tollpetherwin	3½	5
256	Tregordan	1	7
256	Trenane	2½	26½
5000	Treleigh Consols	6	1½
2000	Trenance	3	18
96	Tresavean	10	210
120	Trethellan	5	15
120	Treviskey and Barrier	130	82-85
288	Treveau	1½	5
100	United Mines	300	350
256	Wellington Mines	15	10
128	West Basset	45	7
256	West Caradon	20	65
128	West Cargoll	2	12
512	West Fowey Consols	40	15
256	West Providence	9	12
200	West Seton	40	180
—	West of Scotland Iron Co.	210	210
120	West Trethellan	5	30
256	West United Hills	—	4½
512	West Wheal Frances	1½	2
256	West Wh. Friendship	9	8
3725	West Wheal Jewel	11	1½
256	West Wheal Tolgus	21½	3½
256	West Wheal Treasury	19	8
5200	Wicklow Copper	5	8½
184	Wheal Adams	51	10
1000	Wheal Agar	—	8
256	Wheal Albert	10	1
256	Wheal Allen	2	5
240	Wheal Anderton	23	18
128	Wheal Ann	—	50½
512	Wheal Anna Maria	6½	8
1024	Wheal Ash	4½	8
120	Wheal Bal	5½	20
2560	Wheal Barbara	1½	—
256	Wheal Blencowe	21	5
256	Wheal Bucketts	20	5
256	Wheal Calstock	5	10
136	Wheal Clifford	190	50
1024	Wheal Coad	¼	12½
268	Wheal Courtenay	12½	15
256	Wheal Fortescue	6½	5
388	Wheal Franco	27	18
128	Wheal Harriet	45	50
256	Wheal Jane	21	15
1024	Wheal Lawrence	2½	6
256	Wheal Louisa	8½	8
112	Wheal Margaret	79	250
512	Wheal Mary Ann	5	12½
237	Wheal Mary Consols	42½	5
—	Wheal Penhale	—	12
210	Wheal Prospect	4	7
120	Wheal Reeth	41	150
128	Wheal Rose	60	5
99	Wheal Seton	214	650
194	Wheal Sisters	32½	12
512	Wheal Sophia	3½	5
128	Wheal Spearne	10	75
128	Wheal St. Ann	30	35
550	Wheal Trescoll	3	10
260	Wheal Trelawny	7½	55
256	Wh. Tremaine (St. Ervan)	7½	4
1024	Wheal Tremayne	35	1½
92	Wheal Tryphena	140	265
242	Wheal Venland	29½	30
256	Wheal Vlow (Perranz.)	¼	¾
184	Wheal Vyvyan	—	60
250	Wheal Williams	28½	8
1024	Whiddon Mines	4½	4½

FOREIGN MINES.

Shares.	Company.	Paid.	Price.
5000	Alten Mining Company	14½	2½
15000	Asturian Mining Co.	13	2½
20000	Australian	2½	4
10000	Anglo-Mexican Co.	100	¼
12374	Ditto Subscription	25	2½
6000	Barossa Range	½	1
3000	Bolanos	150	2½-¾
2000	Ditto Scrip	15	3
12000	Brazilian Imperial	23	2½
10000	Cobre Copper Co.	40	13½
10000	Copiapo Mining Co.	14	2
10000	General Mining Ass'n.	20	11
5000	Kinzigthal Mining Ass.	2	3
20051	Mexican Company	59	—
2000	Mexican & South Amer.	8	½
100000	N. Brit. Australasian	1	½
29320	Rl. del Monte, regis. / Ditto unregistered	28½	¼
	Ditto Red Debentures	—	4
	Ditto Black ditto	—	3
	Ditto Loan Notes	150	26
7000	Royal Santiago	10	5
11000	St. John del Rey	15	7½
43174	United Mexican	Av. 28½	2½

SOUTH AUSTRALIAN SHARE MARKET.

Company.	No. of Shares.	Capital.	Paid-up.	Present Price.
Burra Burra	2464	£12,320	£12,320	£150 0
Princess Royal	400	20,000	16,000	40 0
Adelaide	2000	10,000	10,000	3 0
North Kapunda	436	21,800	21,000	15 0
Royal Mining Company	10000	100,000	10s. p. sh.	0 13
Enterprise	1000	3,000	£2,000	2 10
Greenock Creek	300	1,000	1,000	6 0
Montacute	100	5,500	5,500	55 0
Paringa property, per acre				3 10

RAILWAY TRAFFIC RETURNS.

Name of Railway.	Lgth. Rway.	Present actual cost.	Price per share	Last Div.	Traffic Returns. 1848	1847
Belfast and Ballymena	—	—	—	—	£ 386	—
Birkenhead, Lancashire, & Chesh.	15	997,284	37	5 *p.c.**	976	845
Caledonian	141	3,594,470	19	—	5068	—
Chester and Holyhead	84	3,993,732	20½	4	2106	—
Dublin and Drogheda	35½	754,529	23½	—	843	989
Dublin and Kingstown	7½	395,915	—	6	977	1070
Dundee, Perth, & Aberdeen Junc.	47½	415,073	25	8	1090	834
East Anglian (Lynn to Ely)	55½	1,167,104	4½	—	632	—
East Lancashire	31	1,733,915	16	5	1477	1480
Eastern Counties and Norfolk	295	9,833,859	12½	4	15598	14594
Eastern Union	51½	979,926	20	7½	1425	1087
Edinburgh and Glasgow	57½	2,481,767	41½	—	4253	4245
Edinburgh and Northern	48½	1,392,092	15½	4*	2101	—
Glasgow, Paisley, and Ayr	70	2,097,321	60½	6	3163	2911
Glasgow, Paisley, & Greenock	22½	845,545	15	4	1117	1407
Gt. Southern & Western, Ireland	131	1,809,787	21½	4*	3888	1715
Great Western	286½	10,970,636	72	7	21749	21530
Kendal and Windermere	10½	169,888	23	—	229	244
Lancaster and Carlisle	70	1,395,193	46½	4	2871	1640
Lancashire and Yorkshire	154½	7,597,618	86	7	12900	12086
London and North Western	435	21,513,354	117	8	47905	47063
London and Blackwall	4	1,241,061	4	1½	1334	1264
London, Brighton, & South Coast	162½	6,087,822	26½	4	11376	11667
London and South-Western	210	7,139,738	35½	8	11214	10902
Londonderry and Enniskillen	14½	145,135	16	5	133	127
Manchester, Sheffield, & Lincolnsh.	62½	2,336,624	49	5	3412	2486
Maryport and Carlisle	28	440,851	40	—	593	677
Midland Company	423½	13,254,006	82	7	24159	24063
Midland Great Western (Irish)	36½	725,332	10½	4*	1064	814
North British	82	2,800,748	17½	5	3058	2831
Scottish Central	45	1,144,810	23	—	1376	—
Shrewsbury and Chester	23	780,272	11½	—	842	544
South Devon	50½	1,609,071	14	5	1838	1198
South-Eastern	165½	6,932,181	23	6½	11552	12382
Taff Vale	38	820,056	125	5½	1924	1710
Ulster	36	684,684	45½	4½	839	801
Whitehaven Junction	12	147,095	9½	4½	180	208
York, Newcastle, & Berwick	269	4,466,526	27	9	13881	12733
York and North Midland	234	3,799,297	54	10	0635	9470

The Dead Sea.—Some months ago a party was sent out by the United States Government to explore the Dead Sea. It appears that they have most satisfactorily completed their task, having been upon the sea in their boats, or encamped on its borders for some two months, and their researches and estimates have been of the most thorough and interesting character. They have sounded the sea in all its parts, to the depth of 600 fathoms, and found the bottom crystallised salt. The pestilential effects attributed to the waters turn out to be fabulous. Ducks were seen skimming over the surface, and partridges abounded along the shore. The party are at present visiting the most interesting places in the Holy Land.

JOINT-STOCK BANKS.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
22,500	Australasia	£40	£3	£15
20,000	British North American	50	6	42
20,000	Colonial	25	5	4
—	Commercial of London	20	6	18½
4,000	Ionian State	25	6	24½ 25
60,000	London Joint-Stock	10	6	14½
30,000	London and Westminster	20	6	21
10,000	National Provincial of England	35	6	33½
20,000	National of Ireland	22½	5	18
20,000	Provincial of Ireland	25	8	39
4,000	Ditto New	10	8	14
—	South Australia	22½	—	23
20,000	Union of Australia	25	6	22½ 23
10,000	Ditto New	2½	6	2½ 2½
60,000	Union of London	16	6	10½

LATEST CURRENT PRICES OF METALS.

LONDON, SEPTEMBER 15, 1848.

	£ s.	£ s. d.		£ s.	£ s. d.
Iron—Bar *a*..Wales..*ton*	5 10—	5 12 6	Copper—Ord. bottoms	0 0—	0 0 10
„ ..London	0 0—	6 12 6	Yellow Metal Sheathing	0 0—	0 0 7½
Nail rods „	0 0—	7 12 6	Tin—Com. blocks *g*..*cwt.*	0 0—	3 13 0
Hoop (Staf.) „	8 5—	8 10 0	„ bars	0 0—	3 14 0
Sheet „ „	9 5—	9 10 0	Refined	0 0—	3 18 0
Bars „ „	7 10—	8 0 0	Straits *h*	3 10—	3 12 0
Welsh cold-blast foundry pig	3 10—	4 0 0	Banca	3 13—	3 15 0
			ditto for arrival	0 0—	——
Scotch pig *b*, Clyde	2 5—	2 6 0	Tin-Plates—Ch., IC *i*, *box*	1 8—	1 10 0
Rails, average	0 0—	6 0 0	„ IX	1 14—	1 16 0
Chairs	0 0—	4 0 0	Coke, IC	1 5 6	1 6 0
Russian, CCND *c*	0 0—	17 0 0	„ IX	1 11 6	1 12 0
„ PSI	0 0—	——	Lead—Sheet *k*..*ton*	0 0—	17 0 0
„ Gourieff	0 0—	——	Pig, refined	0 0—	18 0 0
„ Archangel	0 0—	13 0 0	„ common	16 0—	16 10 0
Swedish *d*, on the spot	10 15—	11 0 0	„ Spanish, in bd.	0 0—	16 0 0
„ Steel, fagt.	0 0—	15 0 0	Red	0 0—	18 5 0
„ „ kegs *e*	0 0—	13 10 0	Dry White	0 0—	22 15 0
Copper—Tile *f*	0 0—	78 10 0	Shot (Patent)	0 0—	19 5 0
Tough cake	0 0—	79 10 0	Spelter—(Cake) *l* on spot	14 5—	14 10 0
Best selected	0 0—	82 10 0	Zinc—(Sheet) *m* export.	20 0—	21 0 0
Ordin. sheets, *lb.*	0 0—	0 0 9	Quicksilver *n*..*lb.*	0 0—	0 3 6

a Discount 2½ per cent. *b* Net cash. *c* Discount 2½ per cent. *d* Ditto in bond. *e* In kegs ¼ and ½-inch. *f* Discount 3 per cent. *g* Ditto 2½ per cent. *h* Net cash. *i* Discount 3 per cent. *k* Ditto 2½ per cent. *l* Net cash. *m* Discount 1½ per cent. *n* Discount 1½ per cent.

REMARKS.—Iron continues quiet, with an inclination to give way a shade in price of Welsh. In copper nothing new. English tin meets with an improved demand since the fall: the Banca tin (about 25,000 slabs), left unsold at Rotterdam, on 29th ult., has just been bought up at 41 and 42 florins per 50 lbs. Netherland—being an advance of 2s. to 3s. per cent. at Rotterdam. Prices are now adjusted—Straits being fixed at 70s. to 72s., being in proportion with banca, at 73s. to 75s., at which rates parcels just arrived are to be had for re-export. Spelter is dull of sale. In other metals no new feature to notice.

GLASGOW PIG-IRON TRADE, Sept. 14.—We have had rather a brisker demand than usual this week for pig-iron, and the price was rather on the advance; but to-day there was less doing, and the market closed less firmly. The price is about the same as our last quotation—viz., 45s. 6d. for mixed Nos.—cash.

DUDLEY, Friday.—A few weeks ago (subsequent to the last ironmasters' quarterly meeting, when a reduction of the wages of the men was determined upon), it was stated generally, upon the authority of the great manufacturers, that the trade had upon a sudden revived; and that, as compared with the circumstances anticipated, this staple produce and manufacture of South Staffordshire had again become prosperous. At the present moment, the manufacturing condition of the iron districts of South Staffordshire is peculiar. The reduction of wages resolved upon at Stewponey, in July, was carried into effect. The workpeople, it is true, for a time resisted; but afterwards, in consequence of the statements made, and the fair promises held out to them, they returned to, or continued at, work. The attempt made to arrange the rate of wages according to the price of iron, if seriously entertained, appears to have failed altogether. The proposition was fair to the ear, but, up to this moment (the then crisis having passed over), it does not appear that any ordinary, certainly not extraordinary, effort has been made to carry it out. In such a state matters continued until last week, when the men, taking advantage of the reported buoyancy of the trade, again required an advance of, or return to, their old rate of wages. A turn-out was understood to be threatened as a consequence, if their demands were not complied with. The ironmasters have, in the course of the last few days, had two meetings upon the subject. The first was held at the Union Hotel, Birmingham, and the last at the Hotel, Dudley. The result of these meetings, as I understand, is, that the masters have succeeded in convincing the men that the iron trade of the district is not in the prosperous condition in which it has been represented to be, and that at present an advance of wages would be highly injurious to the interests of all parties. It is added, that the men, upon the faith of these representations, have abandoned for the present the idea of a turn-out. There is, however, a printed notice from the coal mines, that an advance of 6d. per day will be required from the 16th. It may be judged from these statements, obtained from unexceptionable authority, that the iron trade of Staffordshire, with the winter approaching, is far from satisfactory. A great portion of the working population are only half or two-thirds employed, while thousands in Wednesbury and its neighbourhood are, in a great degree, dependent upon the poor-rate for their support.

EXPORTS OF METALS TO ALL INDIA FROM LONDON AND LIVERPOOL, FOR THE FIRST EIGHT MONTHS OF 1847 AND 1848.

Metals.		1847.	1848.	*In. in 1848.*	*Dec. in 1848*
Spelter	*Tons*	1868	2261	393	—
Copper		2612	2434	—	178
Iron, British		7883	14009	6125	—
Ditto, foreign		652	203	—	449
Tin-plates	*Boxes*	6495	2931	—	3564
Lead	*Tons*	641	432	—	189
Steel		703	110	—	395
Quicksilver	*Bottles*	50	15	—	35

LEAD ORES.

Sold at Holywell.

Mines.	*Tons.*	*Price.*	*Purchasers.*
Talargoch	87	£9 3 6	Newton, Keates, & Co.
ditto	23	9 6 0	Walker, Parker, & Co.
ditto	17½	9 11 0	J. P. Eyton.
Milwr	10	9 15 6	Newton, Keates, & Co.
Hendre	50	9 1 6	Walker, Parker, & Co.
ditto	12	8 15 0	Newton, Keates, & Co.
Fronfownog	50	9 11 0	Walker, Parker, & Co.
ditto	50	9 11 0	Mather & Co.
Deep Level	80	9 1 0	ditto
Machynlleth	56	9 13 0	Walker, Parker, & Co.
Cwmbrayno	7	9 3 0	Newton, Keates, & Co.
ditto	7	9 3 0	Walker, Parker, & Co.
Strontian	71	9 8 6	Newton, Keates, & Co.
Cairnsmore	60	8 18 0	Walker, Parker, & Co.
Sardinia	60	9 11 0	ditto
Total tons	646½		

BLACK TIN.

Mines.	*Tons.*	*Amount.*	*Purchasers.*
St. Agnes Consols	2	£35 5 0	Daubuz.
ditto	¾	10 0 0	ditto
Plymouth Wh. Yeoland	3½	37 12 6	Calenick Smelting Co.

COPPER ORES.

NO SALE on Thursday last, September 14.

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and Parcels.—Devon Great Consols, Wheal Josiah, Wheal Maria, Wheal Fanny, and Wheal Anna Maria, 1404—West Caradon 340—Fowey Consols 235—Wheal Friendship 223—Poldice 126—Bedford United Mines 101—Charlestown United Mines 75—Wheal Maiden 35—Wheal Williams 31—Wheal Jewel 22.—Total, 2592 tons.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and Parcels.—Consols Mines 961—United Mines 773—Par Consols 360—Perran St. George 312—Tresevean 308—Treviskey 270—South Caradon 269—Wheal Mary Consols 209—Wheal Comfort 185—Treleigh Consols 183—Trethellan 135—St. Aubyn and Grambler 130—Wh. Ellen 114—South Tolgus 90—Wh. Andrew and Nangiles 71—Wheal Henry 53—Barrier 27—Wheal Clifford 23—Ting-Tang 20—Budnick Consols 13.—Total, 4506 tons.

COPPER ORES

At SWANSEA, for sale Sept. 21.—Cobre 102, ditto 92, ditto 60, ditto 45, ditto 35, ditto 29, ditto 99, ditto 70, ditto 64, ditto 39, ditto 99, ditto 73, ditto 46.—Burra Burra 73, ditto 60, ditto 57, ditto 50, ditto 39, ditto 48, ditto 40, ditto 72.—Cuba 116, ditto 109, ditto 33, ditto 81, ditto 66.—Burra Burra 72, ditto 81, ditto 47, ditto 48, ditto 18, ditto 43, ditto 17.—Knockmahon 126, ditto 66, ditto 45.—Kapunda 50.—Australian 40.—Vine Slag 28.—Molong 9.—Total quantity of ore to be sold, 2387 tons.

EXPORTATION OF THE PRECIOUS METALS.—The following are the official returns of the exports of gold and silver from the port of London for the last week:—Silver coin to Belgium, 6000 ounces; ditto to Rotterdam, 178,000 ditto; ditto to British West Indies, 8322—Silver bars to Rotterdam, 86,000; ditto to Hamburgh, 116,534—Gold coin to Belgium, 121; ditto to Havre, 25; ditto to Calais, 144.—Add to last week: silver bars to Hamburgh, 24,000.

THAMES TUNNEL COMPANY.

The number of passengers who passed through the Tunnel in the week ending Sept. 9 was 15,959; amount of money, £66 9s. 11d.

NOTICES TO CORRESPONDENTS.

"Gas from Water."—We received, last week, a communication on this subject, signed "Wm. Grahame, gas engineer," which we have reason to believe was written for an unworthy purpose. We are led to this conclusion from the perusal of a letter, bearing the same signature, which had been addressed to Mr. Stephen White (the patentee of an invention, a notice of which appeared in the Journal of the 26th August), offering "to write for or against," for a stipulated remuneration, and referring to an article about to be published, as a specimen of ability. We are glad we had an opportunity of discovering the object of "Wm. Gruhame" in time, to prevent the appearance of the "specimen article" in our columns.

The *Cornwall Gazette* must not deceive itself to the extent of believing, that by anything it has said on the mining circumstances of the county, it has earned, in any sense, our enmity. We may deplore the course it often thinks it its duty to take. We may be pained at its earnest denunciation of a policy which we conceive to be highly beneficial, but we beg the Gazette to believe that we are entire strangers to that acrimonious hostility which it imputes to us. In its columns of last week reference is made to a short passage at arms which, some 12 months since, took place between that journal and this. We thought it had no motive to cherish such a recollection—we supposed it to have been to the Gazette anything but an exhilirating *souvenir*. Our complaint then was the same which we make now—viz.: that its mining statements are, too frequently injurious exaggerations. The Gazette goes the length of saying, that on the occasion spoken of, we endeavoured to propagate a *dishonest bubble*—these are the bland and conciliatory terms by which it disarms its opponents, and it has disarmed us, for we can make no answer to so undeserved and so unhandsome an imputation. A long patch work and *ex parte* statement appears in the supplementary sheet of the Gazette, in professed elucidation of the impolicy of the Copper and Lead Duties Removal Bill; but we might as well hope to extract sunbeams from a cucumber, as reasons against the measure from that long and laboured communication. We wait the Gazette's exposition of the much-vexed question, and trust it will be both more concise and conclusive than its correspondent's.

Our next Journal will be on the usual Enlarged Sheet, when we shall give a detailed report of the interesting paper on the Prevention of Smoke, read at the Liverpool Polytechnic Society, by C. W. Williams, Esq.; also Mr. Weston's letter on Improvements in Obtaining and Supplying Motive-Power; "Delta," on the Copper Trade; "A Practical Man," on Copper Smelting; and several others, now necessarily omitted.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, SEPTEMBER 16, 1848.

The lively interest which our Journal has from the first taken in the creation and maintenance of an efficient steam-navy, makes the present condition of that branch of the public service, and, we may add, of the public safety, a highly satisfactory and gratifying, reality. It appears that three advanced divisions, consisting altogether of about 30 sail of first-class steamers of war are to rendezvous at Sheerness, Portsmouth, and Plymouth, and at those ports to be permanently kept in a state of readiness, for any, and for all, contingencies. The truth of the observation has rendered it axiomatical, that the best security for peace is a constant preparation for war; and it is, in this sense, that we regard the present as an absolutely pacific armament. To us, as a commercial people, peace is beyond all price, and the essential antecedent to every public blessing; notwithstanding, there is a class of economists among us—not sprinkled sparingly here and there, like daisies in a field, but growing together in clumps, and taking the form, and exercising the functions, of a party—who affirm that even at this reasonable cost, we purchase a probable immunity from war too expensively. With them, if Great Britain is not watching with a miserly earnestness the annual increase of her material wealth, she is as good as doing nothing; and, really, if that were so, the preservation of peace is just the prolongation of that element in which wealth is most rapidly created; and because it is so, and because, also, rank and reputation, authority and power, are placed in all the greater security by the fulness of our armed preparation, we are glad and thankful that the Government has laid up, at an inconsiderable expense, in our great arsenals, a description of force, whose awakened terrors will operate as a salutary check to the turbulent and outrageous in every place, and also as an assurance to all classes, that no slight causes will be allowed, under any pretext, to interrupt the amity of nations.

[FROM A CORRESPONDENT.]

"La Reine le Veut"—"*the Queen assents.*" These were the first words of an article in the last Number of the Mining Journal on the "Copper and Lead Duties Bill." The more this subject is considered, the more harsh and ungracious does it appear, on the part of the Ministers of the Crown, to put into the mouth of their Royal mistress words which, if she had known their purport and effect, would have been most revolting to her truly English and Royal mind. Well is it, for the reputation of the monarchy, that the constitution of this country fixes the entire responsibility of the Royal acts upon those who are the elected advisers of the Crown; and to a fearful responsibility have they subjected themselves on this occasion, or the writer labours under great misapprehension of the consequences of their measures.

Before continuing the commentary upon these proceedings in Parliament, the writer hastens to correct an error into which he inadvertently fell in last week's article, and to which a friend has kindly called his attention. About the middle of the first column of page 429 of the Mining Journal of last week, it is stated, that "an Act was passed in that year (1827), upon the *urgent representations of the English smelters*, to allow foreign copper ores to be smelted in bond." This, it appears, is not the fact. The correction cannot be better made than in the words of the gentleman who has communicated it; and of his exact knowledge of the facts no doubt can be entertained. This gentleman says—addressing the writer of this article—"You have stated that the smelters first procured the Act for smelting under bond about 20 years ago. Now, that was not the case. Mr. Huskisson was then M.P. for Liverpool; and, from his having made an alteration in the Navigation Laws, became unpopular in Liverpool; to repair which, as a sort of sop to his constituents, he obtained an order in council for the bringing home of copper ores, to be smelted in this country under bond and re-exported, which, the following year, he got confirmed by an Act, that I, at the time, did my best to oppose; but to which he obtained the consent of our county Members, without their suspecting the consequences; for they never consulted any of their constituents. One Member alone opposed it in the Commons, and the late Lord Falmouth in the Lords.

"In January, 1830, the English smelters became alarmed at what the result of the Act would be; and, as —— then returned Members, I went to London, and got Mr. Herries to appoint an interview. On his having fixed the time, I applied to the late Lord Vivian (then Sir Hussey Vivian) and his brother, the Cornish Members, and others, to attend; and, after a long discussion with the Minister, I returned into Cornwall, to get up a meeting of the mining interest, at which Lord Falmouth, the High Sheriff, and all the smelters and miners of importance in Cornwall, attended at Truro. A committee was appointed, the late Lord Falmouth being chairman, to wait upon Ministers, to request them either to prohibit such ores altogether, or to put a very high duty on them. I was, unfortunately, prevented from waiting upon Ministers, by an engagement on particular business, on the very day fixed by the Duke of Wellington to receive the deputation, when the committee asked for a total prohibition, which was refused. Had they asked for a high protecting duty, it would then have been granted. At that time the smelting companies were the most strenuous opponents; as they considered that rival smelters at Liverpool, supplied with the rich foreign ores, would ruin them."

I do not scruple to make this *amende* to the smelters for a most unintentional misstatement; and I do it the more willingly, as there is no necessity for heaping upon them any charge, however trivial, which cannot be borne out to the letter. There is quite enough against them which defies cavil to make it imperative that this act of justice should be done to them.

The writer perceives, by a leading article in the last Number, that the editor of the Mining Journal is at issue with him upon some parts of his statements. To that he can have no objection. The subject is well and properly designated as an open question. His facts and statistics he, however, states boldly cannot be disproved. His opinions, as expressed, are those which he sincerely holds, and must be taken *quantum valeant*. Others may differ entirely from him; and nothing would give him greater pleasure than to be justified in admitting, as plainly as he now asserts his opinions, that experience has proved them to be erroneous. But he much fears that no such opportunity will occur for honestly making such a retractation.

The writer's article in the last Number of the Mining Journal was concluded by two or three questions touching the position of the Cobre Mines in Cuba; and the imputed participation of British subjects in the odious and illegal system of slaveholding; a fact unequivocally asserted in Mr. Turnbull's work, from which the quotations relative thereto were taken.

As the foreign mines were then under consideration, it may not be amiss to notice the subject, in connection with those of South Australia, also referred to by Mr. Wyld, who quoted some passages from Mr. Dutton's excellent work upon *South Australia and its Mines*. It is there strongly urged, "that if any restrictions are taken off, it should be not from South American, or other foreign ores, but from the mineral produce of British colonies; and that the distinction which, by the imposition of duties, has so long placed the Australian colonies more in the light of a foreign state than a dependency of the British Crown, may at once cease; and thus help to encourage, as the British Government is bound to do, by every tie of kindred, nationality, and justice to its distant subjects, their industry and exertions." The answer to this just appeal is seen in the last Act of the British Parliament; or, it should rather be said, in the disgraceful conduct of her Majesty's Ministers, and their thick-and-thin supporters.

These references to the speech of the hon. Member for Bodmin are, however, rather out of their proper place, since they were made in committee, upon Mr. Henley's motion for an amended schedule, to which attention may now be directed. The hon. Member for Oxfordshire, on going into committee upon the bill, and when the first line of the Government schedule was read by the chairman, to admit foreign ores at one shilling per ton duty, moved, as an amendment, that—"Ores, the produce of, and imported from, British possessions, should pay *one shilling per ton*;" and that "ores, the produce of, or imported from, foreign countries, should pay *one guinea per ton*." Upon this amendment arose the debate, which terminated in a division, throwing overboard British and colonial industry, by a majority of 38 to 25. Mr. Henley's remarks, in introducing the amendment, were short, but most appropriate, and were marked by that good sense and sound feeling, which characterises all his language in the House, and ever secures its special attention. The same question (said the hon. Member) was involved here as in the sugar duties, with reference to the encouragement given to slavery; and he contended that copper ore from Australia, considering the great length of the voyage and other circumstances, could not be imported with the same advantage as ores produced in Cuba and Chili, if the duties were similar in each case."

It is, one would think, almost needless to say, that the Chancellor of the Exchequer was opposed to the amendment of the hon. Member for Oxfordshire. But, were not the fact sufficiently notorious, any person reading his speech, in reply to Mr. Henley—and dismissing from his mind the mere free-trading and unconstitutional common-places, with which, in his usual pert and flippant manner, he introduced himself to the House—would have supposed that he was advocating the *status quo*. The only part of the right hon. baronet's speech worth notice was his figures. It will suffice to quote a very few lines, as given in the newspaper reports, to show the position which he took.

"The export of copper had largely increased," said the Chancellor:—

In the four years, from 1838 to 1841, the unwrought copper exported amounted to	33,600 tons.
And, in the four years, from 1843 to 1846, to	34,000 tons.
Showing an increase of	1,000 tons.
In the four years, from 1838 to 1841, the wrought copper exported amounted to	24,000 tons.
And, in the four years, from 1843 to 1846, to	35,000 tons.
Showing an increase, in the last four years, of	11,000 tons.

This was Sir Charles Wood's statement. Now, it will be remembered, that 1842 was the year in which the late duties were fixed. Therefore, in giving the export for four years before, and four years after that period, he took a fair mode of showing the averages, and what did he prove? Why, that since that regulation has been in force, which last week's proceedings annihilated, a quantity of 12,000 tons more of copper, of the value of above a million sterling, was exported, than was shipped in the same time before 1842. Therefore, because, under the law of 1842, we are so much more prosperous than we were before the enactment of that law, let us, by all means, repeal it. All the world knows more or less of the connection between cause and effect; and any man, accustomed to argue, generally tries to reconcile his deductions with his premises. But it would have puzzled Euclid himself, or any great master of logic that ever existed, to have reached the same point that settled the English Minister of Finance's self-complacent conviction of the soundness of a conclusion, arrived at by such a course of reasoning.

Mr. Newdegate did not fail quietly to hint at the style of reasoning just noticed, and to enforce the necessity of supporting the amendment, as an act of justice to the "poor people of England;" and it is to be wished that his colleague, Mr. Spooner, had taken as independent a course. The general character of that hon. gentleman is entitled to every respect; but the style of his argument on this occasion, was a little too much in the "he would and he would not" style, to be agreeable to those who sat near him, or to be consistent with himself. "If the hon. Member for Oxfordshire would modify his motion, so as to confine it to slave labour produce, he (Mr Spooner) would support him." Where can the hon. gentleman have learnt this "straw splitting" style of reasoning? He knows, or ought to do, that, of the whole quantity of foreign ores against which Mr. Henley's amendment was directed, about 70 per cent. is actually raised in the slave-contaminated island of Cuba; and the remaining 30 per cent. by a class of labourers, little, if at all, better—the Indians of South America. But the hon. gentleman "thought that, in the experiment of free trade, they should have no partial legislation." After such a sweeping declaration, who would be surprised, if Mr. Spooner were to come forward next session, to move the repeal of the protecting duty of 10 per cent. levied upon all foreign *manufactures* of copper, tin, lead, iron, pewter, &c., &c., the great staples of that portion of his constituents whose favour, it is to be presumed, he thought it politic to carry on this occasion. To be consistent with himself, he is bound to do so; and, in that effort, he will naturally be supported by his former colleague, and near neighbour, Mr. Muntz, who spoke shortly after him in the debate.

If the reader will refer to the last column of the 411th page of the Mining Journal of the 2d Sept., he will there find recorded the following words of the hon. and learned (no,—bearded) Member for Birmingham. "Now, if the duty proposed by the hon. Member for Oxfordshire to be levied upon the foreign copper ore were adopted, the consequence would be, an increase in the cost of the raw material to the British manufacturer, who would thereby be completely disabled from meeting the foreign manufacturer in the market, where he is scarcely able to compete with him at present. He had been often accused of voting one way and speaking the other, on questions of free trade; but he should tell hon. gentlemen opposite, that he was ever ready to support protection, but not the protection they advocated. Their protection was partial in its operation, but he should support protection that would equally extend to all." Surely, after this, and if the hon. gentleman has any regard for consistency of speech or conduct, he might have left the poor miner the sixtenths of that amount of protection which he himself enjoys upon the whole of his trade; or, as the alternative, he is bound, at the earliest meeting of Parliament, to join his quondam and present colleagues in bringing in a Bill for the repeal of the duties now protecting all manufactures of metals. We shall see.

Mr. Ennis Vivian again established his claim to that continued confidence of his Cornish constituents, to which his otherwise worthy colleague must have been wholly indifferent, if a judgment is to be formed by his language and votes (in the present year) on this question. The hon. gentleman (Mr. Vivian) truly told the Birmingham freetraders—freetraders in all but metal *manufactures*—that their town "was as much benefitted by Cornwall, as Cornwall was by Birmingham." He might have gone further, and told them, that, for the last century, but for Cornwall, there would not have been nearly as much *brass* in Birmingham as there has been, and is at the present time. And that the period may arrive, perhaps a little too late for a remedy, when it will be admitted that a policy different from that which has been recently followed would have been the wisest. With reference, also, to the Chancellor of the Exchequer's argument, "that the produce of this country would be improved by the mixture of foreign ores, he (Mr. Vivian) begged to remind the House, that the Bill would have the effect of introducing the poorer ores of Cuba; and, therefore, the result which the right hon. gentleman anticipated, was not likely to be realised."

Upon this question of the introduction of the poorer ores of Cuba, although the subject has been clearly pointed at in portions of the public press, too little has been urged upon it before Parliament. The evil is one of growing magnitude, which will soon make itself manifest.

The evidence of the present week is not very consolatory to the British miner. The monthly account of trade and navigation, to the 5th August, has just been issued by the Board of Trade; which gives the following statement of the foreign ore admitted to duty, in the first seven months of this and the two preceding years:—

In the seven months ending 5th August, 1846, it was		29,501 tons
Ditto	ditto, 1847	21,589 "
Ditto	ditto, 1848	32,752 "
Therefore, 1848 exceeds 1846, by		3,251 tons
And 1848 exceeds 1847, by		11,213 "

or something more than 50 per cent. increase, in this year.

This is an intelligible, and rather striking commentary upon the necessity(!) for the change of the law; and a no less striking evidence of its early effect.

[*To be continued in next week's Mining Journal.*]

A Cardiff correspondent informs us, that the iron trade of South Wales has assumed a very serious aspect—little or nothing doing, and prices nominal. It is expected that notices for a considerable reduction off the present rate of wages will be given at the end of this month.

Our letters from Belgium and Spain contain no particulars worthy notice—business appearing to be universally dull. From France we learn that the miners employed at Rive-de-Gier, in the neighbourhood of St. Etienne, had struck work, for the purpose of obtaining an increase of wages, and a diminution of the hours of labour; they refused to work more than nine hours a day, and demanded 4 fr. 25 c. (3s. 6d.) for that time. The Attorney-General of the district having remonstrated with them, they returned to their employment, on an understanding that their demands should be taken into consideration.

Platina.—The Council General of Mines in France has offered every encouragement to M. Gueymard, the engineer, to prosecute his important discoveries of platina in the Alps; and, from the nature of the soil, it is presumed that this valuable metal will be obtained in some quantity.

PEAT.

The valuable properties of peat have only very recently engaged the attention of philosophical chemists and practical engineers. Yet there is no novelty in its application to ordinary purposes; it has been, for centuries past, and is now, extensively used by the peasantry in every locality where it abounds. The humble mechanic has long since discovered its utility when charred; in his rude operations, he has satisfied himself of its economy in working iron, and its importance in welding steel. The result, however, of more modern experiments not only determines the immense importance of peat, as a manufacturing fuel, both in its raw and prepared states, but reveals a most profitable source of employment for a superabundant and destitute population. In Ireland alone, where its qualities are more generally appreciated, the digging and preparation of turf, now lying in unprofitable waste, cannot fail to prove an acquisition of incalculable benefit to its people. It should there be, as it is rapidly becoming in some districts in England, a staple commodity of the land. Not only the landed proprietary of the sister isle, but the philanthropic capitalists of our own country, should aid their poorer neighbours in the more perfect development of such indubitable and providential resources.

The importance of peat-charcoal, in a commercial point of view, has been ably demonstrated by several of the most eminent practical men of the day, but more particularly by Sir Robert Kane, of Dublin, whose excellent work on the industrial resources of his country, as well within as without the walls of Parliament, has become the political text-book in all matters having relation to the economy of labour in Ireland. That gentleman has pointed out peat as the natural fuel for their peculiarly strong ores. Others, succeeding him, and equally confident in their judgment, have shown that the same desirable effect must be produced by its use for general manufacturing purposes, such as in kilns, distilleries, breweries, sugar refineries, soap factories, salt works, &c. The demand for it, both in this country and in Ireland, must be very great indeed, when its practicability as a smelting fuel has been sufficiently tested by the ironmaster, who will be enabled to compete successfully with foreign produce, now so superior to his own. The excellence of the Swedish, Russian, and Hungarian metals is solely attributable to the mode of preparation entirely by means of turf, or wood-charcoal. Neither of these materials contain sulphur, which English coal does, in a greater or lesser degree; the action of the vapour of which, as is well known, deprives iron of its malleability, subjecting it to split in the forging, or snap from the slightest concussion, when strained. The practical engineer, who is acquainted with peat-charcoal, infinitely prefers it to coal, or coal-coke, as the former unquestionably gives extra stability to his work. In fact, in all our great national manufactures, whether for the working of malleable iron, smelting cast-iron, converting iron into steel, working brass, copper, and tin, or smelting iron from the ore, prepared turf manifests a decided superiority over every description of known fuel. Its economy, as compared with coal, in the production of steam, has been estimated as follows:—Cost of coals, per horse-power, per diem, 7¾; ditto turf, 6. But this is not the only advantage. Mr. Rogers, an eminent engineer, who appears to have devoted considerable attention to this subject, writes—"Boilers fired by peat may be calculated to last nearly double the time of those by coal. The quantity of steam produced from a given surface is considerably greater; while danger from burning the flues, and consequent bursting, is almost entirely obviated—each of which facts I have practically proved. The causes of those great advantages are—1. The total absence of sulphurous vapour (the greatest enemy to iron).—2. The general blazing, almost genial, heat which it yields—thus acting generally and equally upon the whole surface, and producing an universal effect, of the utmost value in the generation of steam." We may add, that the absence of noxious smoke, and burning ashes—the first so distressing at times to the workmen and occupants of railway carriages, and the second so annoying to engineers and detrimental to machinery in operation—complete this list of desirable advantages. The Dublin Steam Navigation Company found that, with 10 cwts. of pit-coal and 2½ cwts. of peat-charcoal, the same steam-power was obtained in navigating their vessels as with 17½ cwts. of pit-coal alone; thereby saving 30 per cent. in the stowage of fuel.

Such are the most prominent features of peat-charcoal as a manufacturing and operative fuel. It must not be overlooked, however, that, for domestic purposes, it is equally excellent and economical. Being a pure carbon, it can need no recommendation for our public hospitals and chambers of invalids. Its superiority is here manifest.

Peat, in its fresh state, is exceedingly plastic; but, when exposed for a few days to the action of the atmosphere, it quickly becomes more compact and tenacious than baked clay, and alike impervious to heat or moisture—hence its adaptation for draining-tiles and common household utensils. In some Irish districts, the first-mentioned are retailed at 4s. per thousand. Of the chemical products of peat, the most considerable are naptha, stearic acid, and tar. These, at the expense of the residuum, may be obtained, in remunerative quantities, by ordinary processes.

[*To be continued.*]

THE GLASS TRADE.

The statistics of the manufacture of plate-glass in England, just published in a tabular form, with a few remarks appended, on a folio sheet, by Mr. Henry Howard, of Piastow, in Essex, are very instructive.

In 1819 the excise duty on plate-glass was 98s. per cwt.; none was made in England larger than 120 in. by 72, the quality was indifferent; the price when 12 in. square was 13s. 1d. per foot, when 120 in. by 72, it was 160s. per foot.

In 1827 the excise duty was 60s. per cwt.; plate-glass 144 in. by 75 was manufactured; the quality was considerably improved; the price of plate-glass, when 12 in. square, was 6. 8d. per foot, when 114 in. by 75, it was 50s. per foot.

In 1847 there was no excise duty on plate-glass; plates 144 in. by 70 were manufactured; the quality was very much improved: the price of plates 12 in. square was 3s. 4d. per foot; plates 144 by 76, cost 35s. 6d. per foot.

In 1819, when the excise duty was 98s. per cwt., the quality of the glass was indifferent, the average price per foot 20s. to 25s., the quantity sold per week about 3000 ft., and the supply apparently equal to the demand.

In 1827, when the duty was 60s. per cwt., the quality was improved, the average price per foot 10s. to 12s., the quantity sold per week about 5000 ft., and the supply inadequate to the demand.

In 1847, when the excise duty had been taken off, the quality was very much improved, the average price per foot 4s. to 5s., the quantity sold per week about 70,000 ft., and the supply very inadequate to the demand.

In 1836, when the excise duty was 60s. per cwt., the estimated number of hands directly and indirectly employed in the manufacture, was about 2500, the capital invested in it about 250,000*l.*

In 1847, when the duty had been taken off, the number of hands was about 12,000, the capital about 1,000,000*l.*

No comment is required on the tendency of these facts to show how much the manufacture was benefitted by the reduction of excise duties; how much more it has been benefitted by entire emancipation from the trammels of the excise.

Since 1845 foreign plate-glass had been allowed to be imported free of duty. In July, 1847, Lord George Bentinck undertook to prove (in Parliament) that the removal of the glass duties had been a failure. He stated that the declared value of glass exported in the first five months of 1845 was 215,630*l.*; in the first five months of 1846, only 131,739*l.* But his lordship omitted to state an important explanatory fact pointed out by Mr. Howard:—"It was in the first five months of 1845 that the duty was remitted, and during that particular period the makers and dealers exported enormous quantities of every description, not on account of increased demand from abroad, but for the express purpose of obtaining the large drawbacks (amounting to bounties) which were then, for the last time, allowed by the excise." Such an omission on the part of the hero of the suppressed despatches was really too bad.

The fact is, that an official return, dated May 5, 1848, printed by order of the House of Commons, shows the total amount of foreign plate-glass, entered for consumption in England, to have been 99,341 feet. This is at the rate of 1920 feet per week. The number of feet of English make sold per week during that time being 70,000, while in 1845 it was only 28,000. The importation, instead of causing a deplacement of English labour, has, by stimulating competition, improved quality, and lowered price, and by thus increasing consumption, caused more English labour to be employed.

The state of the exports, as shown by the return already referred to, is equally satisfactory. The exports of English glass in 1847 exceeded those of 1846, in flint-glass, by 20 per cent.; in common window-glass, by 42; in bottles, by 3; in looking-glasses, by 49; and in plate-glass, by 140 per cent. Well may Mr. Howard remark, "Looking at the unexampled commercial difficulties of 1847, this increase is almost incredible."

Two facts relative to the trade in plate-glass, stated by Mr. Howard, have a bearing upon these general results too important to be omitted. Of two agencies established here, exclusively for the sale of foreign plate-glass, one has been compelled to relinquish the sale of it, simply from inability to withstand British competition. There was no English plate-glass exported to the United States in 1846; while, in 1847, it equalled in amount the exports to all the world in 1846.

How, then, are we to account for complaints made both in and out of Parliament that British interests have suffered from the remission of the glass duties? Mr. Howard throws some light on this question:—"In 1845, when the excise duty was remitted, the English makers reduced the price of small plates (which foreigners could not afford to send here at all) to a fair and equitable scale, but the large plates (which, paradoxical as it may appear, cost less per foot than the small ones) were kept up at the unreasonable rates quoted above. Our neighbours, the French and Belgians, attracted and encouraged by the simplicity which thus invited them here, under cover of our excessive prices, accordingly brought over and sold their larger fabrics at enormous profits, whilst our manufacturers, realising still greater advantages, and supported by an immense demand, refused to modify this extraordinary tariff, although its manifest injustice to the public, and direct tendency to injure the very interest it was intended to promote, have been almost universally condemned as the climax of absurdity."

Labour forms directly and indirectly nearly 80 per cent. of the cost of plate-glass. The raw material is nearly all English produce. In short, it is a natural manufacture. As such it was depressed by heavy excise duties, and not relieved by protection from foreign competition. Since it has been emancipated both from the oppressive and the protective influences of fiscal regulations, it has daily grown in strength and prosperity, in defiance of competition. It is only under such a system that branches of industry, natural to a country, can flourish, and such branches of industry only are really advantageous to a nation.

Original Correspondence.

THE MINING INTEREST OF CORNWALL.

TO CHARLES PASCOE GRENFELL, ESQ., M.P.

SIR,—I shall make no apology for addressing you directly, instead of through the insipid form of a third person. My labours I confess to be humble; but they acquire a degree of sanctity, as they involve the fate of thousands. I appeal on behalf of the perishing, half-starved, miners of Cornwall, and my protest is taken up against the principles which govern the councils of the associated copper smelters. I address myself to you, as the most high-minded of our oppressors. Can you then, Sir, reconcile to your sense of justice and fair dealing the palpable fact of the present smelters having privately, and without any intimation to the mining interests, by an arbitrary *coup de main*, destroyed the entire fabric on which the purchase of copper ore, by ticketing, was erected, by the assembled miners and copper smelters, in 1792?

Inventive genius never devised a plan more subversive of all faith and honourable dealing than the compact of this most unholy alliance presents to us. Do you really think it possible that such a state of things can long exist, or that it will not draw down a heavy retribution with it? For the long period that your great and good father directed the course of the copper trade, we enjoyed the full benefit of a fair competion for our ores—the biddings were open and honest—and, in full reliance in the honour of the smelters, we sent our ores to the ticketings, and accepted, without reservation, whatever price was offered. He died, full of honours and of years, when another interest, which had been long and stealthily creeping up, assumed, and maintains, a directing power in it.

Under this baneful influence, the entire trade has changed its aspect; distress has crept in, where all was confidence; our mines, working in hopes of discoveries, have ceased their operations; our old deep mines are gradually exhausting their resources; the spirit of speculation is entirely destroyed; and our miners are emigrating by thousands: and here it is from whence retribution will fall on you, as surely and certainly as our own destruction will be the result of your combination—our mines will gradually be extinguished, and you will be without a supply of ores, or victims to tyrannise over.—A SELF-EDUCATED MINER: *Penzance, Sept.* 11.

THE MINING INTEREST.

SIR,—I hasten to correct a mistake in my last letter. In estimating the late duty on copper ore, I ought to have remembered that the charge on ore from our colonies—say, containing 20 per cent., was *1l.* 1s. *per ton of metal*, and that on ore from foreign countries, of the same per centage, was *4l.* 14s. 6d. *per ton of metal.* The somewhat puzzling way in which the duty was charged has led many persons into the same mistake; still it is less excusable in me, as I was previously quite aware that the duty was levied in this way—indeed, I have stated in a former letter that there was "on the common ore, containing 8 per cent. copper, a protecting duty equal to 7s. 6d. per ton against foreign, and 1s. 6d. per ton against colonial ore," which agrees, as near as may be, with the correct amount of the duty. I am bound to add, that the all but total repeal of the duty on copper and its ore, now renders it more favourable to our countrymen in the colonies to smelt their ores, by *3l.* 5s. 6d. per ton of copper, and to the foreigner by *4l.* 1s. 9d. per ton. The result of the whole only *confirms the necessity of introducing improvements here* in the smelting of the copper ores. Though the copper mining interest be now in a languishing condition, yet it is no worse than was the iron trade of Scotland, before the improvements were introduced there, which improvements enabled the manufacturer to obtain as much profit in 1845 per ton on 500,000 tons of iron, as he obtained in 1830, when the quantity produced was under 40,000 tons.—WILLIAM BIRKMYRE: *Sept.* 9.

COPPER SHEATHING.—No. V.

SIR,—The ready courtesy of "GERMANICUS" again claims my thanks, the more from his reluctance to this kind of public discussion, which I hope he may be more reconciled to from the conviction, that such easy periodical concurrence and collision of opinions and information, is one of the active and fruitful means of the progress of arts, science, and civilisation. His letters, having been as interesting as appropriate, will be gratifying to your readers, whenever he can make up his mind to favour us. I can only offer him, in return, one analysis of Norway fine copper, not sheet; nor do I know from what refinery:—

Norway block copper	Copper. 99·61	Iron. 0·62	Tin. 0·27	and traces of manganese, lead, and silver.

This, if the copper was got out by experiment, not mere computation, is very fine; but the proportion of iron unusually large. Repeated calcinations, with *intervals of rest*, are thought to benefit the copper, by some unexplained slow reaction, going on while the calcined matter lies in store. Although not seeing what light it can throw on *this* part of our inquiry, I shall wait M. Stromeyer's analysis with much interest. But the question of weeks or days is very important on so heavy a capital.

With respect to the modes of ascertaing the per centage of copper, I apprehend the wet assay (precipitation by iron) generally gives more, the fire assay (in the crucible) less, than the truth; and this was the reason of my question on the subject.

"A ROASTER MAN" is not less entitled to my acknowledgments; and will, perhaps, add (since I am not favoured with the information from your other correspondent) whether any other than the crucible assay is commonly used, at the smelting works, for determining the per centage of copper in the refined cake. His reply to my last is what I expected; and apparently at issue with the opinion of a "SMELTER AND REFINER." Some oxides (however well roasted) will always enter the refining furnace; the interesting question is, whether, by bringing the roaster's work forwarder, the most injurious metals, as antimony, &c., may not be slagged out, before entering the refining furnace at all? And hence, whether, by stinting the roasting, we do not often throw up a vitiated slag in the refinery? where such an uncongenial slag (which can hardly be *entirely* drawn out) is almost sure to yield more or less of its impurities, in the toughening and poling.

These considerations regard the *purification* of the metal only: my inquiries go a step further.

If we regard the smelters objects to be—1. Getting the utmost produce of copper from the ore—2. Freeing it, as much as possible, from other metals—3. At the least expense, and by the surest, simplest, and easiest means,

The further purpose of these letters is, as at first avowed, to ascertain—1. For what purposes *very* pure copper is required?—2. What purposes are best suited by specific alloys, where not so highly purified; and especially sheathing?—3. By what means, and from what ores, each description of alloy may be most easily and certainly made? In short, how to obtain, at least cost, the best metal for each purpose; as, for brass, the more zinc and less iron, the better, which will tinge the copper yellowish; for German silver, the most nickely, which will have a paler copper colour; for bell-metal, the hard metal, drawn off in making select, may often do with not much refining, having a greyish tint: &c.

All these points may, I hope, gain some light in the progress of this discussion; but, perhaps, a "ROASTER MAN" may think this quite enough for his share of one letter.

MR. MUSHET.—His silence, on the subject of carburet of copper, is probably meant to disclaim any personal knowledge of it. If otherwise, I hope he will yet inform us; the compound being, I believe, unknown to chemists as well as metallurgists.—J. FRIDEAUX: *Sept.* 14.

COPPER SMELTING.

SIR,—As this important subject has so fully occupied your columns, the following observations, communicated to me by Prof. Kerstens, the principal comptroller of the Royal Saxon Works, at Freyberg, may be not unacceptable to your readers. The furnaces used here are an improvement on the blast system pursued in the Hanoverian and Prussian Government works. He says, they smelt about 700 German quintals of ore, which give about 200 quintals of coarse metal, containing about 70 quintals of copper. The calcining of the coarse metal will produce 150 quintals of calcined metal, and, by again melting and refining, will be obtained 60 quintals of pure copper—this being the produce of 700 quintals of copper ore in one of our furnaces per week; I have calculated 10 per cent. loss of copper as results at Freyberg. The constant operation of one furnace, properly constructed, and costing about 60*l.*, lasts three or four months without interruption. Coke is the only fuel used, and considered the most advantageous. On an average of five years' smelting, 100 quintals of ore, through all the processes, consume 4 cubic metres of coke—1 cubic metre of coke is equal to $2\frac{848}{1000}$ cubic metres of charcoal. By using coke as fuel, they always obtain a greater produce of metal than by charcoal, or pit-coal. The Freyberg coal gives 68 per cent. of coke. The cubic metre is reckoned to contain 61,023·50 cubic inches, which, reckoning 1728 cubic inches to a cubic foot, will make the metre equal to 35·31 cubic feet. The cubic foot of coke weighs about 24 lbs. In the first reduction, it is reckoned that 1·492 cubic feet are required to smelt 1 cwt. of copper, and that it would take 29·84 cubic feet of coke to smelt an English ton, which is equal to $13\frac{22}{100}$ cwts. of pit-coal.—C.: *London, Sept.* 12.

COPPER SHEATHING—ITS WEAR AND TEAR.

SIR,—I do not think Mr. Mushet is acting fairly, and that he takes a wrong view of the subject, in casting so much blame on the smelters for the waste of so much iron, sulphur, and coal, in reducing copper ores. In the first place, as regards the sulphur and iron, he should confer with the miners on this head; it is their business to see that none of their property goes to waste. If they are content to bring their ores into the market as imported, the smelters have no business to complain; or do they appropriate one fraction's worth of iron or sulphur for any profit. If the copper smelting be such a lucrative business, I would advise him to go into the trade at once. There are two very convenient works soon to be knocked down by the hammer, which, there is no doubt, will go cheap; but, previous to so doing, I would recommend him to treat with the Cobre Company, for a series of years, for a supply of their ores, to secure to himself the enormous profits which would be realised by the collection of the sulphur and iron. As regards the consumption of coal, I hope Mr. Mushet will lose no time in conferring with my master on this most important subject, and endeavour, if possible, to persuade him to adopt his principle, so as not to consume more than 6 tons of coal to every ton of copper. Indeed, I find it hard work in my department (the roasting) to have to shovel so much coal, and remove so much ashes, connected with the working my furnace; and, let my prejudice be ever so strong in favour of the present processes, I would yield (if for no other reason but to save labour) to his suggestions. I hope, when Mr. Mushet commences with his new process, he will inform me, that I may seek shelter under his new and easy method of working; for, *indeed*, there is nothing but hard work here.—A ROASTER MAN: *Swansea, Sept.* 7.

COAL-WORKING—QUESTION.

SIR,—It is not altogether an unfrequent occurrence in the collieries of this district, where a strong post (sandstone) cover overlies the seams of coal, to have a slight illumination in the goaf by the sudden falling in of the roof, and the rubbing together of the broken blocks of stone. Within a few days an occurrence of this kind took place upon, perhaps, rather a larger scale than usual; and it so alarmed the deputy overman, the person then engaged in drawing out the timber, that he was struck with the idea of an explosion of gas having taken place, and it was not until some time afterwards, that he could convince himself to the contrary. Will some of your intelligent correspondents inform me, whether an explosion would have been likely to have occurred, had carburetted hydrogen been present in the above case? I ask this now, as it is a question which, I believe, has long been a disputed point amongst practical pitmen hereabout.

Durham, Sept. 11. A COLLIER.

PURE IRON.

SIR,—In reply to Mr. Mushet's communication, in your Journal of the 2d inst., I may observe, that hydrogen gas has no sensible effect on metallic iron—that is to say, a piece of either pure, fused, or spongy iron, exposed to an atmosphere of hydrogen gas at the ordinary temperature, or at a red heat, would undergo no appreciable change, either in physical or chemical properties, with the exception of the change I have already noticed—viz.: that oxide of iron, reduced at a low temperature, in contact with hydrogen gas, was rapidly oxidisable when exposed to the atmosphere: this is believed to be owing to the same cause as the ignition of a stream of hydrogen in the air by means of a mass of spongy platinum. I am aware that carbonic oxide possesses the property of filtering through the substance of a crucible exposed in a wind or other furnace; yet the amount which passes through, when the crucible is of a compact nature, is so small, that very little inconvenience results. In this case, however, there need be no fear of any injurious action on account of the lining of oxide of iron; for the gas, in passing through it, would be converted into carbonic acid, which gas has no action on metallic iron that is out of contact of water. To show to what a small extent carbonic oxide passes through the pores of a crucible, oxide of lead may be fused, in a good crucible, until the latter is almost destroyed by the fluxing power of the oxide; and little or no lead will be found reduced, provided the fire in which the experiment is made is free from smoke.

Mr. Mushet seems to be in error as regards the determination of carbon in cast-iron. He affirms that it is an impossibility to ascertain its amount by chemical analysis. This I deny; for if a properly arranged apparatus be employed, and the experiment carefully conducted, the determination of carbon in all kinds of iron is as easily and accurately made as in an ordinary organic analysis. It is true, that different results may have been obtained by different chemists from the same sample of iron; yet this does not prove chemical analysis at fault in this particular point—for it has often been observed, even by Karsten, that similar results cannot always be obtained; but, in such cases, different processes have been employed—some of which are less exact; others, more difficult of execution. The differences can only be in the fault of the method employed, and not in the impossibility of obtaining an exact result. I can affirm, with the greatest confidence, that the iron I obtained did not contain a trace of carbon. By the method of preparation Mr. Mushet describes, in the Journal of the 26th August, I cannot understand how the iron obtained could have been pure; it must, I conceive, have been contaminated with carbon, from the very nature of the process employed. I, however, have not yet had time to prepare any by that method, so that I cannot give any experimental proof. If Mr. Mushet reconsiders the matter, he will see that a portion of oxygen, evolved from the coating of oxide of iron, would give no impurity to the iron within; it would merely oxidise a portion, and itself become converted into a highly magnetic oxide of iron. Of course, if the quantity of metallic iron introduced into the crucible were not in considerable quantity above that of the oxide forming the coating, all of it would be oxidised, and no metal would result. This is evident to all who consider the matter. This may also serve for Mr. Rogers, who mentions this effect in your last week's Journal.

I again (as I have often) urge, that iron, in contact with alumina, lime, &c., at a high temperature, decomposes the earths, liberating their metals, and absorbing their oxygen. This does not all disprove the high decarbonating power of the earths, as proved by the late Mr. Mushet. It rather, if it were needed, confirms his experiments; for it is in the oxygen of the earths that we must look for their decarbonating power; it is by the elimination of oxygen from them that this power is called into play—or, in other words, they are deoxidised, in order that they may decarbonate. As regards Mr. Roger's doubts as to the reducibility of the oxide of iron by hydrogen, I fear he cannot have followed the progress of chemistry for a considerable period; for, many years since, the fact he mentions—viz.: that iron will decompose water—seemed to be at variance with the facility with which hydrogen decomposes the oxide of iron. If Mr. Rogers will take the trouble to try the experiment, he will be at once convinced. I, however, will give an extract from Graham's *Elements of Chemistry*, which will at once prove to Mr. Rogers that such is the case, and that it can be explained:—"When steam is passed over iron at a red heat, a portion of it is decomposed—oxide of iron being formed, and hydrogen gas evolved. From this experiment, it might be inferred that the affinity of iron for oxygen is greater than that of hydrogen. But let a stream of hydrogen gas be conducted over oxide of iron, at the very same temperature, and water is formed, while the oxide of iron is reduced to the metallic state. Here the hydrogen appears to have the greater affinity for oxygen; but the result is obviously connected with the relative proportion between the hydrogen and steam, which are at once in contact with the metal and its oxide at a red heat. When steam is in excess, water is decomposed; but when hydrogen is in excess, oxide of iron is decomposed—and why? because the excess of steam, in the first case, is an atmosphere into which hydrogen can diffuse, and the disengagement of that gas is, therefore, favoured; but, in the second case, the atmosphere is principally hydrogen, and represses the evolution of more hydrogen; but facilitates that of steam. This affords an intelligible instance of the influence of mass, or quantity of material, in promoting a chemical change—the steam, or the hydrogen, as it preponderates, exerting a specific influence, in the capacity of a gaseous atmosphere." So that Mr. Rogers will observe that it is not my process for reducing iron from its oxide by means of hydrogen, but that it is an old process, and, although at first sight an anomaly, admits of explanation.

Hawley-road, Kentish Town, Sept. 12. JOHN MITCHELL.

ON THE METALLURGY OF IRON, AND ITS METAMORPHIC CONDITIONS.—No. I.

SIR,—In reference to the metallurgy of iron, and its metamorphoses, so much mooted in your valuable Journal, and to give a more practical direction and bearing to the discussion of so important a matter, permit me to embody in your columns the following queries, whose consideration will lead the mind to more definite expression, as to the nature and formation of these important bodies. To these questions I invite the attention of your readers, with the desire that no one will attempt to answer them otherwise than by the data of positive experiment, duly performed, as opposed to mere theoretical conception and hypotheses. I am led to these strictural requirements, by the impression that many gentlemen will be ready to pounce upon and treat these *postulata* with a spirit bordering on dogmatism, which will, instead of leading to useful, only tend to vicious results, with unscientific cavil, or uncivil recrimination.

The questions now propounded are based upon facts of thought-directed action—*i. e.*, practice guided by theory, experimentally obtained in 1837-8—and will, as such, be used as tests, or touchstones, to develope the *authenticity* or *futility* of all that will be, or has been, written by myself and others on this subject, from the irresistibly correct adjudication of whose ordeal none may rationally withdraw or dissent.

QUESTIONS.

1. What is the *rationale* of combustion that ordinarily has place in the furnace compartment of a puddling-forge?

2. What is the analysis of the products of combustion that pass over the bridge-wall into the reverberatory of a puddling-forge, or evolved in the refinery?

3. What is the analysis of the products of combustion that escape from the reverberatory of a puddling-forge into the stack, to escape into the atmosphere, in both stages of the process?

4. At the temperature of 2500° to 3000° Fahrenheit, which of the twain, iron or carbon, will preferably combine with atmospheric oxygen?

5. What affinity, or kindred, is there between the most fusible cast-steel and the least fusible cast-iron?—and why is hammered bar, of best quality, of lower density than pure iron?

6. What is the cause and nature of the change, whereby melted cast-iron, or finery-iron, assumes the condition of dry sand in the puddling-hearth?

7. Is there any, and what, similarity of componency between the sabulous iron of the puddling-hearth and blistered steel, before fusion?

8. What is the analysis of good blistered steel?—what do the blisters contain?—and why does this form of steel possess the property of welding, which, when melted, is lost to it; and how can manganese, and some other metals, confer this property?

9. As fine cast-steel contains *less* carbon than blistered steel, whence it is fused, and cast-iron contains *more* carbon than the sabulous iron of the puddling-process, how comes it that an excess of carbon in the former, and deficiency in the latter case, should confer, or admit of, the property of welding?

10. In the course of working a puddling-forge—*i. e.*, between construction and dilapidation—what peculiar facts of practice occur to the scientific observer, and in what consists the superiority of Low Moor malleable iron?

I shall construe the silence of your usual contributors, on the subject of these questions, into an acknowledgment of ignorance, more or less profound, of the chemistry and physics of iron manipulation; whilst the contributions that may happen to be recorded in your columns in regard, will be received as the best expletive of the writer's knowledge and experience; and pseudonymous communications will be entertained as *mere subterfuge*.—W. RADLEY, Ch.E.: *Vauxhall, Aug.* 30.

ON THE MANUFACTURE OF COKE.

SIR,—Newcastle coal requires to be converted into coke in an oven, and cannot be converted with convenience, or advantage, in the open air, as in Staffordshire, in consequence of its being small coal. The time occupied in converting coal into coke depends, in some measure, on the state of the atmosphere, although it is made in a close oven. About 50 hours is sufficient for conversion, but the longer time employed the better is the coke, the brighter in colour, and the more sonorous it will be, and the freer from sulphur; the bottom of the oven should be first spread with small coal, about 10 in. thick, having been first well heated with wood, and which, when in work, is never allowed to cool: by leaving the door wide open, the coal will ignite, and as soon as the flame has covered the top of the coal, the door is gradually closed, otherwise, if suddenly, the fire will, probably, be extinguished; when once the door is closed, the air should be kept from it as much as possible, as the oven can never be kept so completely air-tight, as not to leave sufficient for combustion. In the iron folding-doors generally used, it is advisable to have a small one in the centre, for the purpose of looking into the oven from time to time, or, what is better, a rising and falling door, such as is used for the puddling-furnace, in which there is a counterpoise. After the coal has been in the oven about 40 hours, the smoke will have nearly ceased inside, and in about 50 hours the flame will be found to disappear on the top of the coke, when it will be sufficiently burned, and is generally taken out. By letting it remain in for 40 or 50 hours longer, with the door and chimney closed it will be much improved; it has the effect of extracting the sulphur from the coke, and thus qualifying it better for the smelting of ores. The door being then opened, a large iron bar is inserted under the coke, when the mass in which it is formed may be broken, drawn out, and spread on the ground to cool; or, if necessary, may be put immediately in the blast-furnace, as required; or, when perfectly cold, may be stacked in a store-house. No water should be thrown on the coke, as is frequently done. The Tanfield Moor coal is said to make the best coke. The oven chimney may be low, as great draught is not necessary; the entrance to the chimney should be at the further end of the oven, and passing along on the top, as it thereby keeps the dome always hot. In order to have full advantage of the heat produced in coking, the top of the stone may be a small chamber for forms, or roasting-stone, and the flame may likewise pass under the boiler of a steam-engine. The top of the oven should be arched as flat as possible, and built of fire-brick; the side and end walls should be perpendicular, to 12 in. from which the arch should spring. Coke from Newcastle coal is used at the Royal Copper-Works of Mansfeld, in Prussia.

London, Sept. 11. J. T.

STEAM LOCOMOTION ON TURNPIKE ROADS.

RESPECTED FRIEND,—In answer to your correspondent's (R. Weekes) letter, which appeared in the *Mining Journal* of last week, permit me to state, that his amended statement rather puzzles me—for, although the construction of the engine cannot, as he asserts, greatly concern the public at large, yet I humbly presume to think, that its perfect construction *must materially tend to its success*, and, therefore, be a material consideration for the proprietors, at least. I still think, that I put a reasonable construction upon R. Weekes's letter, by imagining that he had not seen Sir J. Anderson's engine, although it now appears he has seen it; and he admits that Sir James has made some improvements, if no accident happens to prevent its success, which he, however, thinks is almost sure to happen, but without being quite certain. R. Weekes *still positively asserts as quite true*, that Sir James has not overcome the difficulties he (R. Weekes) considers in the way. Now, if the improvement, made by Sir James, theoretically meets (as R. Weekes admits it does) the essential conditions required, I cannot but think it would have been more friendly to have waited to see the result of an experimental trial, before *asserting that to be true which can only be determined by actual trial.*

R. Weekes says, I have read his last communication in direct opposition to what he means—viz.: that the friction of the engine is more important to decrease than that arising from the surface of the road. I am still at a loss to conceive how any other construction could be put upon the following conditions:—"1. The condition of the surface of the road *must be of small consequence* to the economical action of the engine.—2. The arrangement of the springs should be such that there cannot be any violent strains in the working parts of the engine. Now, Sir James's invention does not accomplish these conditions." What other conclusion can be drawn from the above statement, than that it was the engine, and not the surface of the road, that required the greatest attention?

I will not assert that Sir James has actually accomplished the desirable objects; but, with R. Weekes's permission, I will state it, as my opinion, that Sir James has done so, notwithstanding that is in direct opposition to R. Weekes's positive assertion. Time and experience will determine which of us are nearest the truth. Of one thing, however, I feel perfectly confident—that, with the aid of timber tracks, such as I have proposed, the public might be conveyed, even with horses, at the speed of 10 to 12 miles per hour, at a maximum charge of three farthings per mile; and with steam at one halfpenny, on all turnpike-roads, where there may be sufficient traffic. I cannot see that there was any unfairness in giving a pro-

bable result in working the road from Hyde Park-corner to Hounslow, merely because it is comparatively a level and good road; all the difference in adopting a more undulating road, would be the reduction of profit, either by a diminished number of passengers, or increased expense, for requisite additional power.

I certainly think R. Weekes has an odd way of showing his advocacy of steam on turnpike roads, by condemning, in an unqualified manner, a plan, which *he admits has theoretically met his views, without waiting the result of a trial.* Yet he thinks Mr. Wrigg's locomotion rail plan will succeed, which is nearly quite new in theory, and has never been tried on a large working scale—at least not with success. I, however, only expressed my doubts upon the plan, after reading the description furnished by the inventor—the plan appeared to me *to be too complicated*; but as I have not seen the whole of the details, of course I am unable to do more than to doubt its success, for the reason stated.

It is, I think, rather unreasonable in R. Weekes, to expect a detailed account of actual working expenses, &c., before the experimental trials are made, in the absence of which it is, of course, out of my power to give; but trusting that the experiment will soon be made, which I still think will be successful, of which, in any case, I will endeavour to furnish a faithful report, I remain, your's, respectfully, THOMAS MOTLEY, C.E.

CANADIAN LAND AND RAILWAY ASSOCIATION.

A public meeting of the friends of the association was held on Thursday evening, at Ellis's School-rooms, George-street, Euston-square, "for the purpose of explaining the objects of the association, and the great benefits that will accrue to those who become shareholders in this great national undertaking." Mr. ROWLAND WILDER occupied the chair, and opened the business of the evening by calling upon Mr. CAMPBELL, the secretary, to explain the nature of the association, which he then proceeded to do, announcing that this was the first of a series of meetings to be held in the metropolis, with a view to ascertain how far the people of this country were prepared to give the association their support. He explained that the society was not intended as a competition with any other emigration society; they were quite willing that those who preferred to go to New Zealand, to the United States, or to Texas, should go there; but the association, considering that part of the world the most fitted for their purpose, advocated the colonisation of the nearest province belonging to Great Britain—Nova Scotia, and New Brunswick. He then proceeded at much length to speak of the advantages of the proposed scheme of colonisation, as a relief for the existing distress in England, and moved the following resolution:—"That, under the heavy pressure of competition, there is a large number of the working classes who cannot obtain employment, thousands who are but partially employed, and others overworked, but who cannot obtain for their labour a sufficiency of the necessaries of life, and therefore they become, in many instances, unwilling paupers, their children remain ignorant, vicious, criminal, dangerous to society, and subversive of its institutions. This meeting, therefore, declares its solemn conviction of the necessity of devising some means by which the working classes may obtain remunerative employment for their skill, capital, and labour, under a well-managed system of association, for elevating their social condition, and thereby securing the peace and prosperity of the empire." Mr. Campbell then explained, that it was proposed to make the institution a joint-stock society, with a capital of 2,000,000*l.*; this seemed an enormous sum, but they all knew what the working classes had done and could do, by means of association; it was proposed to raise the capital by shares of 5*l.* each, and the society intended, in addition to the primary object of the location of the land, to commence the construction of a railroad from Halifax to Quebec, a distance of 600 miles, which, besides furnishing employment in its making, would establish that first necessary to the improvement of landed property, a ready means of communication. Mr. Campbell then read the other two resolutions:—"2. That a well-organised system of colonisation is one admirably adapted to relieve the pressure of competition, and to furnish the working classes with an opportunity of effectually and permantly bettering their condition.—3. That the plan proposed by the working classes to be carried into effect from their own resources, and called 'The Canadian Land and Railway Investment Association,' seems to offer a large field for profitable employment to labour, skill, and capital, if conducted on the principle of association, and under a company authorised by Royal Charter." Mr. Richard Mills seconded the resolutions, which were carried, and the meeting broke up.

TIMBER-PRESERVING COMPANY.—At the first half-yearly meeting of shareholders, held on Friday, the 8th inst., at their offices, Cannon-row, Westminster,—GEORGE BURGE, Esq., in the chair,—a series of resolutions, inserted in our advertising columns, were adopted. We are glad to learn, from the report, that since the committee commenced operations, a fair profit has been realised, notwithstanding extraordinary expenses rendered necessary on the numerous stations of the company established throughout the kingdom. By improvements lately introduced into the process, as tested by public experiments, timber may be rendered absolutely flame-proof [see *Mining Journal*, June 24], which has, of course, greatly enhanced the importance and commercial value of the undertaking. As we have already explained the character and objects of the invention, we think it necessary, at present, simply to obviate a misconception which, we believe, prevails in some quarters, that the process belongs to the same category as the several patents of Kyan, Margary, Burnett, and others. The rationale and principle are essentially different, as they do not merely involve the injection of a preservative solution, or solutions, which would be liable, in the course of time, to wash out, or lose their efficacy, but a process of chemical decomposition, which absolutely transmutes the timber, so to speak, into a new and imperishable substance. The chemical theory of Mr. Charles Payne, on which the invention is based, is demonstrably perfect; and the practice must inevitably correspond. We heartily congratulate the shareholders on their favourable prospects.

DEFRIES'S DRY GAS-METER.—On Wednesday, Mr. Nathan Defries, the patentee of the dry gas-meter, gave his annual dinner to upwards of 60 gasfitters. We also noticed several gentlemen present, whose names are well known in the scientific world; among whom we may mention Mr. J. H. Murchison, Dr. Bachoffner, Dr. Jones, Mr. Faraday, &c. The entertainment was of the first description, both as to the viands and the wines; indeed, everything was supplied on the most liberal scale, and certainly simple justice was done by the guests to their excellence. The usual loyal toasts were proposed, and responded to with the greatest enthusiasm, particularly when the health of her Majesty was given, when "God save the Queen" was sung by the whole company standing, in a manner strongly evincing the most gratifying marks of attachment to the throne. The health of Mr. Defries was then proposed by Dr. Bachoffner, in a few suitable remarks, in which he commented on the good feeling which such convivial meetings were calculated to produce among members of the same trade and profession. He then briefly alluded to his personal experience of the great advantages of the dry meter over the wet meter, and bore testimony to the superiority of Mr. Defries's patent.—Mr. Murchison rose to say a few words in support of the toast: he considered the invention of Mr. Defries as an instance of that ingenuity and industry for which the people of this country were remarkable—as one of the steps of that ladder by which we had raised ourselves to be so great a nation. He referred to the deplorable condition of those countries where the population were almost entirely ignorant, and he contrasted it to the happiness and comfort which prevailed the more that knowledge was extended. He thought, therefore, that the whole community were indebted to Mr. Defries, for his improvement of an article which was unavoidably connected with the artificial light so generally used, and, consequently, so very important.—Mr. Defries, in returning thanks, entered into a very interesting statement of the rapid progress his meter had made, and was still making, in popular favour. He said, that a few days ago he had been ordered to introduce it into the House of Lords, where a very large quantity of gas would be used.—Several other toasts were given and responded to, when the party broke up, shortly after 10 o'clock, much pleased with the evening's entertainment. Before leaving the room, the national anthem was again sung.

NEW PATENT.

W. Dickinson, Blackburn, Lancaster, machine maker, for certain improvements in, and applicable to, looms for weaving.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

J. Callcott, Roehampton St., Vauxhall-bridge-road, rolling valve brass wind instrument.
W. C. Wilkins, Long-acre, pressure lamp.
W. P. Stanley, Peterborough, rolling mill for crushing grain, seeds, and chemicals.
J. Ashby, Greenwich, engineer, screw friction clutch.
W. C. Sleigh, Brick-court, Temple, L'agraffe facile (clasp). [for cattle.
Sandford and Owen, Phœnix Works, Rotherham, portable apparatus for steaming food
D. Hesse, Manchester, combination neck-tie.
Brown and Jackson, Derby, engineers, a mill.
Griffiths and Hopkins, Birmingham, nozzle for candle-sticks.
T. H. James, Bucklersbury, chopping knife.
Burgess and Cooper, Crosby-row, Walworth, a pair of overalls.
Fergusson, Miller, and Co., Glasgow, chimney top.—*Mechanics' Magazine.*

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Bate's West Hartley 14 6—Dean's Primrose 13—Hasting's Hartley 15 6—Holywell Main 14 6—New Tanfield 14—North Percy Hartley 14 6—Original Tanfield 11 6—Ord's Redheugh 12 6—Tanfield Moor 14—Wylam 14—Eden Main 16 to 16 3—Lambton Primrose 16—Nicholson's Main 15 6—Cowpen Hartley 15 6—Derwentwater Hartley 14 9—Hartley 14 9—Parson's Graigola 20 6—Wall's End Brown's 14—Benson 15—Gibson 14 9—Gosforth 15—Hilda 14 6—Northumberland 14 6—Riddell's 14 9—Walker 14 6—Belmont 16—Braddyll's Hetton 16 6—Bell 16—Hetton 17 6—Haswell 17 9—Stewart's 17 3 to 17 6—Kelloe 16—South Hartlepool 15 9—Adelaide Tees 16 3—Denison 15—Seymour Tees 15 9—Tees 17—West Cornforth 15 3—West Hetton 15.—Ships, 150; sold, 75.

WEDNESDAY.—Bates West Hartley 14 6—Chester Main 14—East Adair's Main 13—Hasting's Hartley 16—Holywell Main 14 6—New Tanfield 14—North Percy Hartley 14 6—Ord's Redheugh 12 6—Tanfield Moor 14—Tanfield Moor Bates 13—Townley 14—Wall's End Bell and Brown 15—Brown's 13 6—Benson 15—Framwellgate 15—Gosforth 15—Hotspur 14 6—Killingworth 14 9—Riddell's 14 9—Wharncliffe 15—Eden Main 16—Braddyll's Hetton 16 6—East Hetton 15—Hetton 17—Haswell 17 6—Keepier 16 6—Lambton 16 6—Russell's Hetton 16 9—Stewart's 17—Caradoc 16—Hudson's Hartlepool 15 9—South Hartlepool 15 9—Thornley 16—Denison 15—South Durham 15—West Cornforth 15 6—Derwentwater Hartley 15—Hartley 15—Parson's Graigola 20 6—Elgin 15.—Ships at market 226; sold, 92.

FRIDAY.—Buddle's West Hartley 16 6—Chester Main 14—Hasting's Hartley 16—Holywell Main 14 6—New Tanfield 14—North Percy Hartley 15—Ord's Redheugh 12 6—Tanfield Moor 14—Tanfield Moor Bute's 12 6—Townley 14—Wall's End Brown's 13 6—Benson 15 3—Gosforth 14 9—Hotspur 14 3—Hilda 14 6—Riddell's 14 6—Dean's Primrose 13 9—Belmont 16—Braddyll's Hetton 16 6—Bell 16—Hetton 17—Lambton 16 6—Russell's Hetton 16 9—Shotton 16—Stewart's 17 3—Caradoc 16 3—Heugh Hall 15 6—Trimdon 15 6—Seymour Tees 15 9—Whitworth 14 6—Derwentwater Hartley 15—Hartley 15—Parson's Graigola 21.—Ships at market, 145; sold, 67.

CURRENT PRICE OF GOLD AND SILVER.

Foreign gold, in bars .... per oz.	£3	17	9	New dollars ..... per oz.	£0 4 10½
" Portugal pieces	0	0	0	Silver in bars (standard)	0 4 11½

WHEAL LAWRENCE COPPER AND LEAD MINING COMPANY—BRIDPORD, NEAR EXETER. 40

This company has been formed by a few private gentlemen, and consists of 1024 shares, upon which a deposit of £3 per share will be required upon the formation of the company.

Application for shares to be made to the secretary, at the office of the company, No. 3, Winchester-buildings, Old Broad-street, London, where a list of the directors, with a prospectus, may be obtained.

CORNWALL NEW MINING COMPANY.

Capital £100,000, divided into 20,000 shares, of £5 each.

Deposit, £1 per share.

Three further calls, of 10s. per share, at 6, 12, and 18 months.

Incorporated in pursuance of the Statute of 7 and 8 Victoria, cap. 110. 41

BANKERS—London and County Bank, 21, Lombard-street.

The CORNWALL NEW MINING COMPANY is ESTABLISHED to WORK a series of TIN and COPPER MINES, chiefly in the district of ST. IVES, which has hitherto afforded a larger profit on its return of ore than any other part of the county.

In pursuance of this plan, five have been already selected—viz.: Georgia Tin Mines, Trewortha Tin and Copper Mine, Bray Tin and Copper Mine, Trevarno Tin and Copper Mine, and Wheal Squire Tin and Copper Mine—with whose owners the directors have succeeded in making such advantageous arrangements, as to enable them to work one or more with even a small portion of the proposed capital.

The directors beg to announce, that they are NOW ALLOTING the SHARES in the above company; and, from the number already disposed of, they request parties desiring to take shares to make early application. Those to whom allotments have been made, are requested to pay their deposits into the bankers of the company, as above.

The Deed of Settlement having been executed by the required number of shareholders to incorporate the company, parties who now take shares will not be required to sign it, or enter into any personal liability for calls or otherwise, although reserving their full rights as shareholders.

Office, 17, Essex-street, Strand. GEO. LOCKWOOD, Secretary.

UNDER BRITISH AND FOREIGN LETTERS PATENT.—Valuable INVESTMENT, by partnership or otherwise.—ABSORBENT and SOFT STONE INDURATED, rendered impervious to wet, frost, vermin, &c., and polished as high as marble, for all purposes.—CHALK, SAND, PLASTER, WOOD, CARTON-ROOF SHEETING, &c., treated equally as successful. 42

Established works, *à la Maladrérie*, near Caen, and at Tunbridge Wells, where orders are executed much cheaper than other stone, &c.—Hutchison and Co.'s offices, East Temple Chambers, 2, Whitefriars-street, Fleet-street, London.

N.B.—LICENCES GRANTED.

PATENT FLEXIBLE INDIA-RUBBER PIPES AND TUBING, for Railway Companies, Brewers, Distillers, Fire-Engines, Gas Companies, Gardening and Agricultural purposes, &c.

THE PATENT VULCANISED INDIA-RUBBER HOSE-PIPES 43

are made to stand *hot liquor* and *acids*, without injury—do not become *hard* or *stiff* in any temperature (but are always perfectly flexible); and as they require NO APPLICATION of oil or dressing, are particularly well adapted for *Fire Engines, Pumps, Gas, Beer-Engines, Gardens*, and all purposes where a *perfectly Flexible Pipe* is required.

Made all sizes, from ¼-inch bore upwards, and of any length to order.

Vulcanised India Rubber Garden Hose, fitted with brass-taps, Copper branch and Rose's complete, ready to be attached to pumps, water-butts, or cisterns.

Sole manufacturer, JAMES LYNE HANCOCK,

Goswell Mews, Goswell-road, London.

N.B.—Vulcanised India-Rubber Washers, of all sizes, for joints of hot-water and steam-pipes, and *Vulcanised Sheet Rubber*, any thickness, for all kinds of joints, and other purposes

PATENT ALKALI COMPANY'S IRON PAINT.—This PAINT is the PRODUCT of a PATENT PROCESS, and possesses PECULIAR and VALUABLE PROPERTIES, not otherwise attainable. 44

Its colour (as at present produced) is a rich *purple-brown*. It is perfectly free from the deleterious qualities of white lead.

It surpasses all other paints ever yet discovered, in point of *durability* and *economy*.

Two coats of this paint are more than equal to three of any other description.

From its chemical composition, it is pre-eminently adapted for covering *iron*; also *wood*, and *stuccoed*, or *brick buildings*. The process by which the base of this paint is produced, makes it impossible that any change should take place in its composition from atmospheric influence. Its identity with iron secures it from galvanic action, so fatal to the durability of lead and other paints on iron work.

It has been exposed on shipping to the action of sea-water, and of the sulphuretted hydrogen, so prevalent in sea-ports and tidal harbours, for more than three years, without change.

Its *cheapness* and *strength* render it peculiarly suitable for *iron bridges, roofs*, and *railings, farm buildings*, and *shipping*. It will also cover creosoted timber.

Price, by the ton, £25, delivered in London, exclusive of packages.

Agents will be appointed for the principal towns in the United Kingdom; in the mean time, orders may be addressed to the offices of the company, No. 20, Fenchurch-street, London. JOHN A. WEST, Secretary.

PATENT IMPROVEMENTS IN CHRONOMETERS, WATCHES AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £8 to £10 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each. 45

DENT'S PATENT DIPLIEDOSCOPE,

or Meridian Instrument, is now ready for delivery.—Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

PROFESSIONAL LIFE ASSURANCE COMPANY,

Connecting the Clerical, Legal, Military, Naval, and Medical professions, and holding out advantages to the public not hitherto offered by any similar institution.

Incorporated.—Capital £250,000. 46

Established upon the mixed, mutual, and proprietary principle.

Rates essentially moderate.—Every description of policy granted. Immediate, survivorship, and deferred annuities; and endowments to widows, children, and others.—Every policy (except only in cases of personation) indisputable.—The assured permitted to go to and reside in Canada, Nova Scotia, New Brunswick, Australasia, Madeira, Cape of Good Hope, and Prince Edward's Island, without additional premium.—Medical men remunerated for their reports.—Loans granted on real or personal security.—One-tenth of the entire profits appropriated for the relief of the assured while living, and of his widow and orphans.—Annuities granted in the event of blindness, insanity, paralysis, accidents, and any other bodily or mental affliction, disabling the parties. Persons of every class and degree admitted to all the advantages of the corporation.—Rates for assuring £100 at the age of 25, 35, 45, and 55, respectively—namely, £1 14s. 6d., £2 5s. 6d., £3 4s. 3d., and £4 18s. 6d.

Prospectuses, with full details, may be had at the office.—Applications requested from parties desirous of becoming agents. EDWARD BAYLIS, Actuary and Secretary.

Offices, 76, Cheapside, London.

NORTH BRITISH RAILWAY.—Mr. Hudson, who has lately become the purchaser of the Newcastle and Carlisle, and Maryport and Carlisle Railways, is likely to become the possessor also of the North British. At the half-yearly meeting of shareholders, held at Gibb's Hotel, Edinburgh, on the 13th inst., a committee was appointed to negociate with Mr. Hudson for the sale or lease of the line, and the meeting stands adjourned till the 14th Oct. It is said the terms will be 6 per cent. for three years, and 7 per cent. in perpetuity afterwards, being the same as were offered to, and accepted by, the Carlisle and Newcastle Company.

LEEDS AND THIRSK RAILWAY.—This railway, which was formally inspected last Friday by Captain Wynne, R.E., one of the railway inspectors, between Weeton-lane, near the River Wharfe, and the city of Ripon, was opened for traffic on Thursday between those places, making 28 miles of this railway (from Thirsk to Weeton) now available for public use.

NEW DISTANCE SIGNAL ON THE SOUTH-WESTERN RAILWAY.—This company, with its well-known anxiety to guard against accidents, and to inspire confidence in the minds of those travelling on their line, have been for some time past using every endeavour to find out a plan or method to signal an approaching train, when in danger of its running into other trains preceding, or there being any accidental obstruction, or if the "shunting" of a slow train at any of their stations has not been completed, when an express or fast train becomes due; such as at Kingston-on-Thames, where the Guildford quarter-past five from London has arrived; the express ditto, for Southampton, following in five minutes afterwards. At this station, the first or second class ordinary train has to be moved, or "shunted," to let the express train go by—so near do they sometimes arrive, that many gentlemen and ladies going by those trains at that hour of the day, get out of the carriages until the fast train has gone by, many expressing their fears that, some time or other, a most serious accident must occur. This induced C. Stovin, Esq., the general manager of the traffic deparment, to try and find out some method of prevention. In this effort that gentleman has been fortunate enough to succeed, and at the present moment a new distance signal is being fixed up by Messrs. Stevens and Son, ironfounders, of Darlington-works, Southwark-bridge-road. It is so constructed that a man at the station will be enabled, by means of a crank, easily worked, fixed to a wire, similar in thickness to those by which the electric telegraph is now worked, to give the danger signal instantaneously, at a distance of at least 600 yards from where he is placed; that signal to be clearly observable at a further distance of three-fourths of a mile, so that on a fast train approaching a sharp curve, the driver will discover the danger, and have ample time to stop before he reaches the obstruction or danger. As it frequently happens such curves are near to stations, this invention will prevent, with ordinary caution in future, dreadful accidents, similar to those so frequently occurring of late. The machine, or signal, stands about 20 feet from the ground, being made secure to a strong frame, firmly fixed; on the sides are fastened connecting rods, and other works; at the top the usual colours are painted for day, and similar colours reflected from a lamp by night. When it will be required to stop a coming engine, the red will be instantly displayed, when to slacken speed the green is shown, and when to pass, the white is conspicuously observed, the one required being shown in the segment of a circle. The whole is expected to be up and completed for use in a day or two. Similar signals are now making by the same firm, to be fixed at the Weybridge, Farnborough, and other stations on the South-Western line, where such curves are. The men who are to be appointed to work these signals will have additional wages paid them, and are to be chosen from the most steady and experienced servants on the line. The worker of this machine will be enabled instantly to discover whether the proper light or colour is reflected by night, observing the same colour he wishes to show reflected through a round aperture in the centre of the reflecting lamp.

STEAM TO INDIA AND CHINA, VIA EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG. 47

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton on the 20th of every month; and from Suez on or about the 10th of every month.

BOMBAY.—Passengers for Bombay can proceed by this company's steamers of the 29th of the month, to Malta, thence to Alexandria by her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA—On the 20th and 29th of every month. CONSTANTINOPLE—On the 29th of the month. ALEXANDRIA—On the 20th of the month.

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th, 17th, and 27th of the month.

ITALY.—Genoa, Leghorn, and Civita Vecchia, at intervals of six weeks. The next vessel will leave Southampton at TWO P.M. on Saturday, the 7th of October, 1848.

For plans of the vessels, rates of passage-money, and to secure passages, and ship cargo, apply at the company's offices, No. 122, Leadenhall-street, London; and 57, High-street, Southampton.

NOTICE TO SHIPPERS OF GOODS AND PARCELS, per PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY'S STEAMERS, to INDIA and CHINA.—GOODS and PARCELS sent direct to the company's parcel office, on or before 6 P.M., on the 17th of each month, are forwarded at less cost to shippers than when sent through any intermediate channel. Cases must not exceed 112 lbs. weight each, for Aden, Ceylon, Madras, Calcutta, and China; and 40 lbs. each case for Bombay. No package for India or China can, under any circumstances, be shipped at Southampton, unless it be cleared through the Custom-house, and placed alongside the steamer by noon on the 19th of each month. 48

Detailed particulars can be obtained on personal application, or by writing.

Parcel Department, 122, Leadenhall-street.

RIDER'S RAILWAY BRIDGE.—TO RAILWAY COMPANIES.—A PROSPECTUS of the above newly-invented IRON TRUSS RAILWAY BRIDGE will be FORWARDED, and CONTRACTS entered into, or LICENSES GRANTED for its ERECTION, on application to Mr. Moulton, Bradford, Wilts. 49

TIMBER PRESERVING COMPANY.—(PAYNE'S PATENTS FOR THE PRESERVATION OF TIMBER AGAINST DRY ROT, FIRE, RAVAGES OF WORMS, &c.

The above company are ready to ENTER into ARRANGEMENTS for the PREPARATION OF TIMBER, at any of their under-mentioned stations—viz.: 50

Whitehall Wharf, Westminster	Barnstaple	Guildford
Fleetwood-on-Wyre	Leicester	Southampton
Wisbeach	Lynn	Hartlepool
Gateshead	Staines	Darlington

And they will erect the necessary apparatus, wherever there is a considerable quantity of timber to be prepared.

Further particulars, with prices, may be obtained at the London Works, Whitehall Wharf, Cannon-row, Westminster.

TIMBER-PRESERVING COMPANY.—At the First General Meeting of the company, held at the company's offices, Whitehall Wharf, Cannon-row, Westminster, on Friday, Sept. 8, 1848,

GEORGE BURGE, Esq., in the chair.

The secretary having read the advertisement convening the meeting, the following resolutions were unanimously adopted:—

1. That the common seal of the company be affixed to the register of shareholders.
2. That the following gentlemen be the directors of the company—viz.: 51

George Burge, Esq.	Charles Payne, Esq.
Henry Hitchins, Esq.	Charles Browne Smith, Esq.
Frederick Hitchins, Esq.	John Neville Warren, Esq.
Edward Loder, Esq.	William Warren, Esq.

That the annual sum of £436 16s. be paid to the directors for their services, as from the 1st May, 1848, and that such sum be apportioned among them in such manner as they may think fit.

3. That Mr. William Bridges and Mr. William Bunce Greenfield be appointed auditors to the company, and that they be paid the annual sum of Ten Guineas each for their trouble.

4. That the directors be authorised to appoint a secretary, and to pay him such salary as they may think fit, not exceeding £400 per annum.

5. That the directors be authorised to order the common seal of the company to be affixed to the deeds and instruments necessary for vesting in the company the letters patent, warehouses, workshops, yards, premises, machinery, plant, materials, stock, property, and effects, purchased on behalf of the company, from Messrs. Payne and Loder, and for securing to Messrs. Payne and Loder the purchase-money, or other consideration for the same. GEORGE BURGE, Chairman.

That the thanks of the meeting be given to the chairman, for his able conduct in the chair. R. C. DUKE, Secretary.

PATENT GALVANISED IRON AND WIRE ROPE WORKS, *MILLWALL, POPLAR.* 52

ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he has obtained a PATENT for an IMPROVED METHOD of GALVANISING IRON, producing a much superior article at a considerable saving in cost—the improved process for galvanising wire rope, adding only £10 per ton instead of £20, under the ordinary processes. The rope is extensively used in damp situations, for mining and railway purposes, and for ships' standing rigging.

EMERSON'S PATENT LIQUID CEMENT.—This VALUABLE and ECONOMIC PAINT is READY FOR USE—is simple in its application, and only *one-sixth* the cost of *oil paint*; for beauty, it is pre-eminent over all other materials used on the fronts of houses—giving the exact appearance of FINE CUT STONE. It can be used at once on fresh Roman cement, or other plastering, and is particularly calculated for country houses, villas, or gate entrances that have become soiled or dingy, which can be at once beautified in any weather, at a mere trifling cost. 53

*** Sold in casks of 1 and 2 cwts., at 8s. and 15s. each.

PATENT MINERAL PAINT.

A brilliant black paint, invaluable as a coating for SHIPS' SIDES and BOTTOMS; also for all kinds of WOOD or METAL WORK, or the asphalte roofing felts, leaky roofs, spouts, and gutters, doors, sheds, railings, and all kinds of out-door work; and, being perfectly waterproof, will preserve their surfaces from atmospheric influence and decay; requires no preparation, and will dry in a few hours.—Price 2s. per gallon.

PATENT ASPHALTE ROOFING FELT, of the best quality, at 1d. per square foot, in pieces, 25 yards long and 32 inches wide.—GEORGE LEAR & CO., Sole Agents for the Patentees, 5, Church-court, Clement's-lane, Lombard-street.

LAP-WELDED IRON TUBES, W. H. RICHARDSON, Jun., and CO., MANUFACTURE every description of WROUGHT-IRON TUBES, for Locomotive and Marine Boilers, Gas, Steam, and other purposes. 54

PATENT TUBE WORKS,
DARLASTON, STAFFORDSHIRE.

RAILWAY AND OTHER IMPORTANT RECORDS, EFFECTUALLY PROTECTED FROM DAMP AND VERMIN.

Extract from the Appendix to the Second Report of the Commissioners on the Fine Arts.

"In 1839, I superintended the construction of a house, of three stories, on the Lac d'Enghein. The foundation of the building is constantly in water, about 19½ inches below the level of the ground floor. The entire horizontal surface of the external and internal walls was covered at the level of the internal ground floor with a layer of 55

SEYSSEL ASPHALTE,*

less than half an inch thick, over which coarse sand was spread. Since the above date, no trace of damp has shown itself round the walls of the lower story, which are, for the most part, painted in oil, of a grey stone colour. It is well known that the least moisture produces round spots, darker or lighter, on walls so painted. Yet the pavement of the floor, resting on the soil itself, is only about 2½ inches above the external surface of the soil, and only 19½, at the utmost, above that of the sheet of water. The layer of asphalte having been broken and removed, for the purpose of inserting the sills of two doors, spots, indicating the presence of damp, have been since remarked at the base of the door-posts.

The DIRECTORS of the SEYSSEL ASPHALTE COMPANY have much pleasure in recommending to the notice of ENGINEERS and ARCHITECTS the application of the ASPHALTE of SEYSSEL, as the *only effectual* mode of preventing damp in basement floors, and water from percolating through the ARCHES of a VIADUCT.

The arrangements of this company enable works of any extent to be executed with the greatest promptitude. I. FARRELL, Secretary.

SEYSSEL ASPHALTE DEPOT, STANGATE, LONDON.
ESTABLISHED 1838.

* This method has been adopted at the New Houses of Parliament.

STEPHENS'S DYES FOR STAINING WOOD as a SUBSTITUTE FOR PAINT—For DECORATING CHURCHES, LARGE PUBLIC ROOMS and THEATRES, as well as PRIVATE DWELLINGS, giving the effect of oak, mahogany, or satin wood.

When economy in expenditure of material and time is of importance, these dyes will be found of the greatest advantage, as they give a rich colour to plain woods, while they reflect all the beauty of the natural graining, which is so superior to imitations by art, and, at the same time, avoid the disagreeable smell and deleterious consequences of paint.

The DYES, or STAINS, are prepared and sold by HENRY STEPHENS, 54, Stamford-street, Blackfriars-road, London, in bottles of 6d. and 1s. each, and at 8s. per gallon.—They may be obtained in powder at 8s. per lb., which dissolves in water to form the liquid, and 1 lb. will make one gallon of grain. Sold also at the office of *The Builder*, 2, York-street, Covent-garden, London; also, by Hopkins and Purvis, Greek-street. 56

N.B.—The trade supplied.

Also his COMPOSITIONS FOR WRITING WITH STEEL PENS.

STEPHENS'S WRITING FLUIDS compose the most splendid and durable colours, and the most indelible compositions which art can produce. They consist of—

A BLUE FLUID, changeable into an intense black colour.

PATENT UNCHANGEABLE BLUE FLUIDS, remaining a deep blue colour. Two sorts are prepared—a light and dark blue.

A superior BLACK INK, of the common character, but more fluid.

A superior CARMINE RED, for contrast writing.

A liquid ROUGE CARMINE, for artists and contrast writing, in glass bottles.

A carbonaceous RECORD INK, which writes instantly black, and being proof against any chemical agent, is most valuable in the prevention of frauds.

A liquid MECHANICAL and ARCHITECTURAL DRAWING INK, superior to Indian Ink.

MARKING INKS for linen; select STEEL PENS; INKHOLDERS.

Prepared by the inventor, HENRY STEPHENS, 54, Stamford-street, Blackfriars-road, London; and sold by all booksellers and stationers everywhere,

In Bottles, at 1d., 2d., 3d., 6d., 1s., and 3s.

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their offices, No. 26, FLEET-STREET, where all communications are requested to be addressed. [*September* 16, 1848.